DIAMONDBACK
Fitness

500/900

Service Manual

Product Service Policy

All Diamondback Fitness Dealers are required to agree to the following. This document outlines the relationship between Diamondback and our authorized dealers in the areas of: a) service after sales; b) warranty parts support and purchase; and c) labor authorization and support.

1. It is the responsibility of the Dealer to diagnose/troubleshoot, service, repair or otherwise correct any problems that may occur with a Diamondback Fitness Product that they sell, regardless of where the product has been placed.

2. Initial assembly of each Diamondback Fitness unit is the responsibility of the dealer. The Dealer is responsible for any damage and or costs incurred due to improper assembly, accident, misuse, improper maintenance or failure to follow instructions, and or warnings in the owner's manual.

3. All warranties are valid from the original date of purchase to the original purchaser only [proof of purchase is required]. In the event that the original date of purchase cannot be verified, the warranty will be valid from six (6) months after the manufacturing date of the unit.

4. Warranty exclusions for Diamondback products placed under light commercial warranty include: health clubs, schools or correctional facilities.

5. Diamondback Fitness will credit the Dealer's account a flat rate of US$85 for each pre-authorized labor claim. The credit will be issued one time to correct a problem on a unit. Additional labor claims can be submitted against the unit if another [different] problem occurs during the labor period.

6. If, after working with the Diamondback Fitness Warranty/Technical department a minimum of three separate occasions, it is determined that we cannot repair a specific problem with a unit, Diamondback will RA the unit and replace, freight prepaid.

7. Defective return units must be boxed in suitable packaging and include all parts and accessories originally included with the unit. Any parts missing or damage incurred due to improper packaging will be deducted from the total credit at listed dealer cost.

8. All Diamondback Fitness Dealers will be billed for warranty replacement parts. Dealers receive credit upon return of the replacement parts to Diamondback. See Warranty Credit Processing policy for more details.

9. All returned, potentially defective, items are tested on arrival to Diamondback. Dealer will incur a bench charge for any items that are determined to be in good working order and not defective. Dealer will incur a bench charge, be re-invoiced for the original cost of the item[s], and will have item[s] returned freight collect if defective due to abuse; improper installation. See Warranty Credit Processing policy for more details.

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Domestic Warranty Information

(Applies to all product sold and placed within the continental US, Alaska, Hawaii, and Puerto Rico only)

Effective: May 2008
Diamondback warrants its 500 and 900 model units to be free from defects in material and workmanship under normal use in the home and light instructional environments. Diamondback's obligation under this Warranty is limited to repair or replacement of any defective part without charge through an authorized service agent to the original purchaser with the following parameters:

Who is covered:
The Warranty is extended to the individual or legal entity whose name appears on the Warranty registration card filed with Diamondback and may not be transferred to any other individual or legal entity.

To obtain service:
To obtain service you must contact your authorized Diamondback Fitness dealer. Your dealer is also your authorized service agent. An authorized service agent must diagnose your unit in order to determine Warranty claims/issues.

Sales where the unit is delivered unassembled (in a carton) to the end user (e.g. mail order or Internet sales) without a service contract purchased through the dealer voids the Warranty.

Warranty Registration:
Warranty commitments are valid only with a completed Warranty card that is returned within 15 days from the date of purchase and includes the product serial number. Registration is available at www.diamondbackfitness.com.

Proof of purchase from Diamondback's authorized dealer will be required if the Warranty card is not registered prior to any consideration of Warranty claim.

What is covered

Home use only

Frame:	Lifetime limited Warranty, covers defects in welds, materials, and workmanship.
Brake:	Lifetime limited Warranty
Parts & Electronics:	3 Years
Labor:	1 Year

Warranty voided if:

The Warranty does not apply to any failure of the product, or any parts of the product, due to: assembly errors, alterations, modifications, misuse, abuse, accident, improper maintenance, or if the serial number on the product has been removed, altered or defaced. Assembly errors include but are not limited to:

Damaged wire harness.
Stripped crank arms and/or pedals.
Bolts used in the wrong location.

Parts & Service:
Contact the authorized Diamondback dealer where unit as originally purchased. If you have moved, or that retailer is unavailable, use our dealer locator at www.diamondbackfitness.com to help find another authorized dealer.

Domestic Warranty Information (Continued)

Diamondback is not responsible for arranging Warranty service and/or honoring extended warranties provided by dealers.

Exclusions:
Warranty is void if the 500 or 900 model units are placed in a commercial or light commercial environment, such as health club, school, or correctional facility.

Additional Rights:
This Warranty is expressly in lieu of all other warranties, and any implied warranties of merchantability or fitness for a particular purpose created hereby, are limited to the same duration as the express Warranty herein. Raleigh America, Inc. shall not be liable for any incidental or consequential damages. Some states do not allow the exclusion or limitations of implied warranties, incidental or consequential, so the above limitations and exclusions may not apply to you.

Retailers and wholesale outlets for Diamondback Fitness Inc. products are not authorized to modify this Warranty in any way.

This Warranty gives the original owner specific legal rights. Other additional rights may vary from state to state.

Diamondback Fitness
c/o Raleigh America Inc.
6004 S. 190Th St. Suite 101
Kent, WA 98032

Ordering Replacement Parts

Please review the following information before placing any order with the Diamondback Warranty Department:

1. Look up the needed part the Diamondback exercise unit in the appropriate Service Manual. There are pages that list all sub assembly parts in the Service Manual.

2. The part will be marked with a three (3) digit number. This number corresponds to the last three (3) numbers in the DB SKU (DB stock keeping unit number). On the Parts List page, all drawing numbers are listed in ascending numerical order. Next to the drawing number, we list the full DB SKU number, part description, and page number where you will find the exploded view of the part you have selected.

3. When you turn to the proper page, the Diamondback SKU number will be at the top and the picture will show all the items that are included with that specific part.

4. If the part is to be ordered as a warranty replacement, be prepared to give the following information at your time of order placement:
   a. The type and model unit.
   b. The purchase date.
   c. The serial number of the unit.
   d. The symptoms the unit is displaying.

5. Diamondback National Warranty can be reached at 800.776.7642 to place parts orders or get troubleshooting advice.

Warranty Order/Credit Processing

When a warranty parts order is placed and shipped your account will be invoiced for the parts that need to be returned. To receive a credit for these defective warranty parts you will need to return them to Diamondback. To ensure your credit is properly processed, please follow these steps:

STEP 1: KEEP IT
Keep all warranty order "packing slips" along with all defective parts that have a $ amount in the right column of the form. Destroying of any Warranty part with a cost of more than $0.00 will result in the invoicing of that part to your account.

STEP 2: REVIEW IT
If you have any questions or aren't sure of which parts need to be returned, contact the Diamondback Warranty Department to review the packing slip and items.

STEP 3: SENT IT
If any of the item(s) on the packing slip have a cost greater than $0.00 a DHL EZ Return tag will be included. Send the return item(s) along with the "packing slip" via DHL using our DHL EZ Return tag WITHIN 45 DAYS TO EXPEDITE CREDIT

WHAT IF?

Q: What if all the items on the packing slip show a cost of $0.00?
A: If all the items on the form have a cost of $0.00 please immediately and properly destroy the defective parts. No credit to you account is needed since you will be invoiced for $0.00.

Q: What if there are items that you need to return but didn't receive a DHL EZ Return tag?
A: Call Diamondback's National Customer Service/Warranty at (800) 776-7642 and we will mail a tag to you.

If you have any other questions, don't hesitate to call the Diamondback warranty department - (800) 776-7642.

Effective Date: August 2008

Labor Credit Policy

In the event a Diamondback Fitness unit is delivered with a factory defect or if a malfunction occurs within the prescribed warranty period, an authorized Diamondback Fitness dealer can file for a labor stipend. To ensure prompt credit for your labor, follow the guidelines listed below:

1. Verify the purchase date of the unit. Proof of Purchase may be required. In the event that the original date of purchase cannot be verified, the warranty will be valid from six (6) months after the manufacturing date of the unit.

2. Verify the warranty of the unit. The Warranty for a Diamondback Fitness unit can be found in the back of the original owner's manual.

3. Call Diamondback's National Warranty / Customer Service prior to attempting any repairs to receive a work authorization number. Please be prepared to give the following information:
   a. Your Diamondback account number and location
   b. Model of unit
   c. Specific problem the unit is experiencing
   d. Date of purchase
   e. Serial number of unit

4. Your Diamondback Tech Rep will issue a work authorization number and/or enter an order for the necessary parts.

5. Once the servicing Diamondback Fitness dealer receives the parts, he should make the necessary repairs and complete the labor credit form.

6. NOTE: completed forms help expedited the claim reimbursement. Once the labor credit form has been filled out, return it to the address listed below or fax it to Diamondback Warranty at (800) 395-9548.

7. If the labor claim meets all the above listed criteria, Diamondback Fitness will credit the dealer's account a flat rate [based on 2008 leveling program] for each pre-authorized claim. The credit will be issued on time to correct a problem on a unit. Additional labor claims can be summated against the unit if another problem occurs during the labor period.

8. ALL returned, potentially defective, items will be tested on arrival. Dealer may incur a $30.00 bench charge for any items that are determined to be in good working order and not defective. Dealer may incur a $30.00 bench charge, be re-invoiced for the original cost of the item(s) returned freight collect if defective due to abuse; improper installation.

If you have any questions, contact National Warranty/Customer Service Department @ (800) 776-7642.

Effective Date: August 2008

Labor Credit Form

NOTICE: You MUST call Diamondback Fitness and obtain a DB Authorization Number PRIOR to performing service. **ANY FORM SUBMITTED INCOMPLETE WILL BE REFUSED.**

DB Authorization Number: _____ Date of Repair: _____

Dealer's Information: (Please Print Clearly)

Account Name: _____

Account Number: _____ Technician's Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Facility's / Consumer's Information that Received Service:

Name: _____

Address: _____

Phone Number: _____ Contact: _____

Unit Information:

Model Repaired (i.e.: 500Ub): _____ Date Unit Purchased: _____

Serial Number: _____

Description of Problem:

_____

_____

_____

Repair Performed:

_____

_____

_____

_____

FAX COMPLETED FORM TO 1-800-395-9548

Product History Report

Dealer:	Service Date	Sales Order	RA Number
Account Number:	1		
Technician:	2		
Phone:	3		
Fax:	4		
Model:	5		
Serial Number:			
Consumer's Name:	Sales Order # for any parts received for repair.		
Date of Purchase:	RA Number for labor authorization for repair.		
Consumer Phone/Fax/Contact:			
Consumer's Address:			

-----Service Information-----

All fields must be filled out completely including the sales order number which replacements parts (if any) were ordered under.

Original Complaint
1st Service (parts replaced)
2nd Service (parts replaced)
3rd Service (parts replaced)

Fill out form completely and fax to the Diamondback Fitness Warranty Department at 1.800.395.9548. Any potential unit return must meet criteria set forth in the Product Service Policy, line item 7, a copy of which is attached with this sheet.

Troubleshooting Guide

No power
There is no apparent power to the console. LEDs and LCDs are not lit up and keys are not functioning.

1. Check wall socket for power (Procedure 1).
2. Check AC adapter for correct output (Procedure 2).
3. Check input jack for power (Procedure 3).
4. Check wiring harness (Procedure 4).
5. Replace console (Procedure 5) .

E-1 Message
There is an error message E-1 showing on the data matrix.

1. Unplug the power cord and plug back in.
2. Check motor on brake assembly (Procedure 9).
3. Check wiring harness (Procedure 4).
4. Replace brake assembly (Procedure 9).

Partial LED's
The console has power but some of the console lights are dim or out completely.

1. Check wall socket for power (Procedure 1).
2. Check AC adapter for correct output (Procedure 2).
3. Check input jack for power (Procedure 3).
4. Check wiring harness (Procedure 4).
5. Replace console (Procedure 5).

Keys Not Responding
No changes when keys are depressed.

1. Check user's programming (See owner's manual).
2. Check wiring harness (Procedure 4).
3. Run console test program (See test program instructions).
4. Replace console (Procedure 5).

Console Resets
The console starts normally then resets during workout.

1. Check input jack for power (Procedure 3).
2. Check wiring harness (Procedure 4).
3. Check user's programming (See owner's manual).
4. Replace console (Procedure 5).

Console Frozen
No change in display or data.

1. Unplug the power cord and plug back in.
2. Check user's programming (See owner's manual).
3. Check wiring harness (Procedure 4).
4. Replace console (Procedure 5).

Troubleshooting Guide (Continued)

No RPM
RPM, Calories, Distance show "0" on Data window.

1. Check other console function (time, pulse, level).
2. Check wiring harness (Procedure 4).
3. Check RPM sensor (Procedure 6).
4. Replace console (Procedure 5).

Max Resistance
Get max resistance at Level 1 or it is very hard to pedal right after power on.

1. Check user's programming (See owner's manual).
2. Check to see if all moving components spin freely.
3. Check wiring harness (Procedure 4).
4. Check belt alignment (Procedure 10).
5. Check brake assembly (Procedure 9).

No Resistance Change
Unit turns on but the resistance won't change when requested at the console.

1. Check user's programming (See owner's manual).
2. Check wiring harness (Procedure 4).
3. Check brake assembly (Procedure 9).
4. Replace console (Procedure 5).

Hand Grip Pulse Heart Rate Problem
Erratic heart rate reading; too low, too high, or not working at all.

1. Moisten hands lightly and retry.
2. Check results with another user.
3. Check hand pulse wire harness (Procedure 7).
4. Check hand grip pulse sensors (Procedure 8).
5. Replace the console (Procedure 5).

Chest Strap Heart Rate Problem
Erratic heart rate reading; too low, too high, or not working at all.

1. Check the chest strap belt transmitter.
2. Check for interference from outside source.
3. Replace console (Procedure 5).

Programming Problem
Not starting correctly, not accepting program time, not taking user info, etc.

1. Check user's programming (See owner's manual).
2. Run console test program (See test program instructions).
3. Replace console (Procedure 5).

Troubleshooting Guide (Continued)

Mechanical Noise
Grinding, Ticking & Clicking. Thumping, Squeaking & Squealing. Twanging/Spring noise.

1. Check bottom bracket bearings (Procedure 12).
2. Check pedals (Procedure 13).
3. Check crank arms (Procedure 14).
4. Check to see if all moving components spin freely.
5. Check belt alignment (Procedure 10).
6. Check belt tensioner (Procedure 11).
7. Check brake assembly (Procedure 9).

Pedal Slipping
Sudden resistance change in pedals under higher resistance and/or RPM.

1. Check belt alignment (Procedure 10).
2. Check belt tensioners (Procedure 11).
3. Clean Pulley surface and replace belt .

Repair Procedures

Procedure 1
Checking the wall socket for power

1. Check whether there is a wall switch controlling this wall socket.
2. Set the voltmeter to the appropriate setting for your country. (U.S. = AC/200 volt setting)
3. Place the test leads into the hot and neutral receptacles on the outlet.
4. Your meter should display the appropriate output for your region. (U.S. = 110-120 volts)

Procedure 2
Checking the AC adapter for correct output

1. Plug the AC adapter into functioning outlet.
2. Check the output with your voltmeter by setting it to the DC/20 volt setting.
3. Place the test lead inside the male plug end of the adapter and the second lead on the outer metal surface of the plug.
4. The voltmeter should read between 10 and 20 DC volts. 1

Procedure 3
Checking the input jack for power

1. Remove the left sidecases from the unit (Procedure 15).
2. Leave the AC adaptor plugged in to wall & input jack.
3. Set the voltmeter to the DCV/20 Volt setting.
4. Locate the two wires from the main wire harness which connect with the back of the input jack. Touch the two test leads to these connection points, being sure to make contact with metal.
5. The voltmeter should read between 10 and 20 DC Volts.

Procedure 4
Checking wiring harness

1. Remove the sidecases from the unit (Procedure 15).
2. Inspect all the connecting points and that the pins are correctly inserted into the plugs.
3. Visually inspect each wiring harness for cuts, burns or melted spots.
4. Check that the harness that runs to the console is not pinched.
5. Note: During installation of the console mast the wiring harness may get pinched or cut.
6. With the unit plugged in, check the voltage at the harness/console connector, P1 (referring to wiring diagram). Set the voltmeter to a 20VDC setting.

Procedure 5
Replacing the console

1. Remove the 4 Phillips screws from the console back panel on the back of the console.
2. Unplug the connectors from the back of the console.
3. Remove the 4 Phillips screws from the back of the console
4. Reverse the process for installation.

Procedure 6
Checking/replacing the RPM sensor

1. Checking the RPM sensor
   a. Remove the sidecases from the unit (Procedure 15).
   b. Verify that the drive pulley magnet is still in its slot on the interior face of the pulley.

Repair Procedures (Continued)

c. Make sure that the RPM sensor is sufficiently close to the pulley (approx. 6/16 inch).
d. Verify that the RPM sensor is plugged in to the wire harness by following the wire.
e. Set the multimeter to read resistance (0hms).
f. Detach sensor wiring from main wire harness, and place test leads inside sensor connector.
g. With the magnet rotated away from the sensor, the multimeter should read infinite resistance.
h. With the magnet rotated adjacent to the sensor, the multimeter should read close to 0 Ohms.

2. Replacing the RPM sensor
   a. Remove the original RPM sensor by unscrewing and unplugging it from the wire harness.
   b. Install the new RPM sensor by screwing in place and plugging in it to the wire harness.
   c. Be sure to place the sensor close to the pulley magnet while making sure that no physical contact occurs (approx. 6/16 inch).

Procedure 7
Checking the hand pulse wire harness and sensor

1. Remove the 4 Phillips screws from the back panel of the console.
2. Check that the hand pulse wire connector is plugged into the wires coming out of the console securely.
3. Use a multimeter to check continuity from the connector plug to stainless steel hand pulse sensor.
4. If there is no continuity, proceed to remove the grip sensor steel plates as described in Procedure 8 to check connection of wire harness to the sensor.

Procedure 8
Replacing the hand grip pulse sensor

1. Remove the Phillips screw on the bottom of the handlebar.
2. Unplug the two connectors on the back of the hand grip pulse sensor.
3. Remove the hand grip pulse sensor.
4. Reverse the process for installation.
   Note: Be careful while putting the screw back on not to pinch the wire harness

Procedure 9
Checking /replacing the brake assembly

1. Checking the Motor Assembly
   a. Remove the sidecases from the unit (Procedure 15).
   b. Verify that the motor wire harness is plugged in to the main wire harness.
   c. Check the solder connections on motor and position sensors.
   d. With unit plugged in, raise the resistance up to maximum and observe whether the motor rotates. If possible, plug in another similar console and repeat previous procedure.
   e. With unit plugged in, raise the resistance up to maximum and observe whether the arch of magnets rub against the flywheel. This will create noise and/or stop the flywheel from spinning. Adjust if necessary, see replacement procedure.

2. Replacing the brake assembly
   a. Remove the sidecases from the unit (Procedure 15).
   b. Unplug the motor from the main wire harness.
   c. Remove the two bolts that attach the brake assembly to the frame
   d. Reverse the process for installation.
   Note: Increase the resistance to level 16 and make sure the arch of magnets is 2mm away from the flywheel. Loosen the mounting bolt right next to the motor and using the adjustment nuts on

Repair Procedures (Continued)

the side of the brake adjust this distance if necessary.

Procedure 10
Checking /replacing the flywheel assembly

1. Checking the flywheel assembly
   a. Remove the sidecases from the unit (Procedure 15).
   b. Derail the drive belt from off the drive pulley.
   c. Spin the flywheel by hand and inspect for noise and/or motion impediment.
   d. Verify that flywheel is securely mounted in place.
2. Replacing the flywheel assembly
   a. Remove the sidecases from the unit (Procedure 15).
   b. Derail the drive belt from off drive pulley.
   c. Loosen the flywheel mounting bolts.
   d. Remove the flywheel.
   e. Reverse procedure with new brake to install.

Procedure 11
Checking belt alignment

1. Inspecting for belt slip
   a. Remove the sidecases from the unit (Procedure 15).
   b. Check the belt and belt tensioners for proper tension and adjust if necessary.
   c. Pedal the unit above 60 RPM and adjust the resistance up to its highest setting.
   d. Keep pedaling and have an assistant visually check all the belts and pulleys for slipping.

2. Adjusting for proper tension
   a. The belt tensioner should be centered on the belt while pedaling and holding it taut.
   b. Raising the tension by tighten the bolt at the end the tensioner spring pulling the tensioner. Tighten the bolt one turn at a time until the proper tension is reached.

Procedure 12
Checking/replacing the belt tensioner

1. Checking the belt tensioner
   a. Remove only the right side case from the unit (Procedure 15).
   b. By hand, turn the pedal backward and observe the belt position on the belt tensioner.
   c. Switch directions to turn pedal forward and observe whether belt changes direction on the tensioner.

2. Replacing the belt tensioner
   a. Remove the sidecase from the unit (Procedure 15).
   b. Derail the poly-v Drive Belt.
   c. Remove the four bolts that hold the belt tensioner assembly in place.
   d. Add grease on the surface of the replacement tensioner which is contacting the frame of the unit.
   e. Reverse the process for installation.

Procedure 13
Checking/replacing the bottom bracket bearings

1. Basic test for bad crank bearings
   a. Check for bearing play by pulling the crank arms laterally. Replace if there is any lateral move-

Repair Procedures (Continued)

ment.
   b. Sit on the bike and pedal above 80RPM. Stop pedaling and allow the bike to freewheel. If the noise continues, the damage is most likely to the flywheel. If the noise stops, the damage is most likely to the crank bearings or idler bearings.
   c. Slide off the drive belt from the drive pulley.
   d. Spin crank by hand to see if there is noise.
   e. Spin belt tensioner to see if there is noise.

2. Replacing the bottom bracket bearings
   a. Remove the pedals and crank arms from the unit (Procedures 13 & 14)
   b. Remove the sidecases from the unit (Procedure 15).
   c. Derail drive belt from pulley.
   d. Remove the C-ring from the left side of the crank axle.
   e. Slide the Drive Pulley with crank axle off the unit. You may have to use a hammer on the left side to tap on the axle
   f. Punch out the defective ball bearings using a shaft and a hammer.
   g. Insert the new bearing into the frame of the unit.
   h. Install the Drive Pulley and Axle onto the frame from the right side.
   i. Keeping pressure on both bearing surfaces, press the bearings so they fit securely within the frame.
   j. Secure the C-Ring clip into place just beyond this second bearing.
   k. Install the sidecases.
   l. Install the crank arms, making sure to tighten the crank bolts or nuts to at least 450 kg-cm of torque.

Procedure 14
Checking/replacing the pedals

1. Pedal inspection
   a. Check that the pedals are firmly tightened to the crank arms.
   b. Spin the pedals with your hand. The bearings should feel smooth.
   c. While grabbing the outside edge of the pedal, move it up and down to check for play. They should have no play

2. Pedal replacement
   a. Remove the pedals with a 15mm open end or adjustable wrench (Note: The left pedal is reverse thread).
   b. Reverse the process for installation. Retighten pedals after each 8 hours of use.

Procedure 15
Checking/replacing the crank arms

1. Crank arm inspection
   a. Check that the crank spindle bolts or nuts are tight.
   b. Check for play by pulling the crank arms laterally. Be sure it isn't a bad crank bearing assembly causing any movement.

2. Crank arm replacement
   a. Remove the pedals with a 15mm open end or adjustable wrench
   b. Remove the spindle bolts or nut from the crank arms.
   c. Using a standard bicycle crank puller, remove the crank arms.
   d. Reverse the process for installation.

Repair Procedures (Continued)

Procedure 16
Removing/Replacing the sidecase

1. Remove the bolts from the crank arms.
2. Use a standard bicycle crank puller to remove the crank arms.
3. Remove the Phillips head screws from the sidecases.
4. Reverse the process for installation.

500Ub.Sr Service Menus

There are two service menus on this console:

A. The Console Diagnostics menu which checks the functionality of the console. It also displays the software version and the accumulated run time. In addition it has a Model Switching feature that changes the active model the console is operating on from 2 options: Cycles and ellipticals
B. The English and Metric switching menu which changes the display units from pounds, miles, and miles/hour to kg, km and km/hour.

A. Console Diagnostics

1. Press and hold the Enter Key for 2 seconds
2. Press Enter Key to toggle through the Service Mode states. To terminate the Service mode without going through all the steps, press & hold "Stop" key for 2 seconds to reset the console.
3. Software Version – The Dot Matrix display will display the software as "SW" "1.0"
   a. First display "SW"
   d. Then display "1.0" and it will Wait for the Enter key to be pressed

4. Reset to Factory Defaults – When the Enter key is pressed after the software version is displayed, it will allow for the console to be reset to Manufacture defaults.
   a. The Dot Matrix will flash "RS", and then display an "N". The Up and Down keys can be use to toggle between an "N" and a "Y".
   b. If the Enter key is pressed while the "N" is on the display nothing will change.
   c. If the Enter key is pressed while the "Y" is on the display the model setting will change to UR, Age will rest to 35years, the Weight will reset to 155lbs, the Custom Trainer profile will reset to its default profile (see section 11.3.4 for profile)

5. Model Setting: When the Enter key is pressed after the Reset to Facture selection is done the Dot Matrix will display configuration of the console as "UR" or "EF".
   a. Up/Down keys can be pressed at this point to switch the mode. The mode determines which Watt table and Calorie calculation is used.
   b. Wait for the Enter key to be pressed to move to the next step in Service Mode.

6. Memory Test – When the Enter key is pressed after the Model Setting is done, it will test the memory, if OK it will display "OK" in Dot Matrix or "NG" if it is bad.

7. Accumulated time – When the Enter key is pressed after the memory test is completed, it will display the accumulated time in the time display.

8. Perform Display test – When the Enter key is pressed after the accumulated time is displayed, enter the display test.
   a. All of the LEDs, and in the LCD will light up at once.
   b. All LEDs and displays will turn off

500Ub.Sr Service Menus (Continued)

c. The Dot Matrix will light up row-by-row and column-by-column. At the same time the program LED Indicators will light up one by one.
d. Every segment in of the digits in the data display windows will light up segment by segment.
e. All messages will light up.
f. This process will repeat itself until the enter key is pressed

9. Perform Key test – When the Enter key is pressed after the Display Test, enter the Key test. When Display Test is completed, all program LED Indicators will light up, and the LDC will turn off
   a. Press Program key and its associated LEDs will turn off and the default workout profile will be displayed in the Dot matrix.
   b. Press function key, the Pulse display will display an associated number to indicate each key, see table below.

Up	Down	Enter	Start	Stop	Fan
1	2	3	4	5	6

   c. Press ENTER key during keypad test, 1st time "Enter" key is pressed, the pulse display will show the number 3 to indicate this key test. 2nd time pressed, it will go into the next test state.

10. Perform RPM and Pulse test - When the Enter key is pressed after the Key test, enter the RPM & HR test.
    a. The massages RPM and Pulse will light up
    b. If there is an RPM signal detected, the RPMs will be displayed in the RPM display. Otherwise, "---" will be displayed.
    c. If a HR device is engaged it will display the current HR in the Pulse display. Otherwise, "---" will be displayed.

11. Perform Brake Motor Test - When the Enter key is pressed after the RPM and Pulse test, enter the Brake test. It will increase the resistance from level 1 to level 16 and back down to level 1. The brake motor feedback voltages will be:

Level	1	2	3	4	5	6	7	8
Voltage	0.05	0.39	0.52	0.63	0.69	0.76	0.81	0.85
Level	9	10	11	12	13	14	15	16
Voltage	0.89	0.91	0.94	0.97	1.0	1.02	1.04	1.06

12. End Self Diagnostics - When the Enter key is pressed after the Brake test, reset to Idle mode

B. Metric/English Units Setting

Factory Default display is English system: Weight = lbs, speed = mile/hr, distance = miles

1. Switch English to Metric System: Press and hold the START & ENTER keys at the same in idle mode.
2. The dot matrix window will display "EN" message when it is in English units or "ME" when it is in Metric units.
3. Press "UP or DOWN" key to switch ENGLISH units to METRIC units or Metric to English.
4. Press "ENTER" key to accept the new setting and return to idle mode.
   Note: A Reset to Factory Defaults (from Service Mode) will reset the console to English units.

The Service Menus allow testing of proper console function as well as adjustment of basic features of the console.

900Ub.Sr Service Menus

Basic Operation
Service Menus are accessed from Idle Mode by holding down the "Enter" key for 2 seconds. The Up and Down keys can be pressed to scroll through the following 5 menu choices:

A. Self Tests
B. Units Setup
C. Model Setting
D. Sound Setup
E. Reset to Factory Defaults

To activate a menu function, scroll to the function, then press Enter key. If there is no key pressed within 5 seconds, the console will automatically return to Idle Mode.

A. Self Tests
1. Scroll to the Self Tests menu choice in the Service menu choices and press the Enter key.
2. Once the self tests are entered the Star/Stop key can be pressed and help for 2 seconds to return to Idle Mode.
3. Software Version Test: the console will show the software version on the alphanumeric display with a message that will read "SOFTWARE V1.0"; the number will change according to the software version. Press the Enter key
4. Total Console Hours Test: The total use hours of the console will be shown on the alphanumeric display with the message "TOTAL USE = XXXXHR". Press the Enter key
5. Memory Test: The memory of the console will be tested and the message display will display "RAM OK" to indicate that there are no problems with the memory, if it finds a problem it will display "RAM NOT OK". Press the Enter key
6. Display Test: The Alphanumeric window will show the message "DISPLAY TEST". Then it will start its activity as below.
   a. All the LEDs turn on at once including the segments and messages in the Main Display and Alphanumeric Display.
   b. All LEDs will turn off. In the Main LCD everything will turn off, only the Messages will stay on with the message "DISPLAY TEST".
   c. The message display will turn off the message "DISPLAY TEST" and will light up one segment of every character at the time.
   d. Every program will be tested and the program name will be display in the message display and the profile will be displayed in the dot matrix.
   e. This process will repeat itself until the enter key is pressed

7. Key Test: The message display will show the message "KEY TEST".
   a. Press any key to test that it is working. When a key is pressed, the message display will show the name of program under that key or the name of that key. The associated LED(s) with that key will light up. The display will show the following names for the keys:

      Manual Program Key: MANUAL
      Random Program Key: RANDOM
      Interval Program Key: INTERVAL TRAINER
      Hill Climb Program Key: HILL CLIMB
      Fitness Test Program Key: FITNESS TEST
      Strength Program Key: STRENGTH
      Custom Trainer Program Key: CUSTOM TRAINER

      Target HR Program Key: TARGET HR
      HR Interval Program Key: HR INTERVALS

900Ub.Sr Service Menus (Continued)

Data display Key: SELECT
Start/Stop Key: START/STOP
Enter Key: ENTER
Display Key: DISPLAY
Level Up Key: LEVEL UP
Level Down Key: LEVEL DOWN
Fan Key: FAN

b. The first time the Enter key is pressed, it will show the key name on the display. The second time Enter is pressed the console will move to the Heart Rate/RPM Test.

8. Heart Rate/RPM Test: The alphanumeric display will show the message "RPM/HR TEST". The display will then show "RPM = XXX HR = XXX" if there is a RPM or HR device engaged. Otherwise, it will display "RPM = - - - HR = - - -". When Enter is pressed, the console will move to the Brake Test.
9. Brake Test: The display will show the following message "BRAKE TEST" then "INTENSITY = 1".
   a. The test will begin with the brake motor set to Level 1.
   b. Press the Up key to increase the resistance to the next level or Down to decrease by one level.
   c. For each change in the brake motor setting, the display will show the next intensity level. The brake motor feedback voltage will be:

Level	1	2	3	4	5	6	7	8
Voltage	0.05	0.39	0.52	0.63	0.69	0.76	0.81	0.85
Level	9	10	11	12	13	14	15	16
Voltage	0.89	0.91	0.94	0.97	1.0	1.02	1.04	1.06

   d. When the Enter key is pressed the console will return to Idle Mode.

B. Units Setup

1. When Enter is pressed on this menu choice, the Alphanumeric will display "ENGLISH" or "METRIC" depending on the setting of the console. The Up/Down keys can then be used to scroll between the two.
2. If Enter is pressed while "METRIC" is shown on the display, the console will be set to use metric units (kg, km) for all distance, speed, and weight displays.
3. If Enter is pressed while "ENGLISH" is shown on the display, the console will be set to use English units (lb, miles) for all distance, speed, and weight displays.
4. Once Enter is pressed and the console units are set, the console will return to the Idle Mode.
5. A Reset to Factory Defaults will always return the console to using English units.

C. Model Setting

1. When Enter is pressed on this menu choice, the console will display the current model setting of the console:
   "ER" = Rear drive elliptical
   "UR" = Upright/recumbent
   More model choices may be added to the software in the future to support more products.

2. The Up/Down keys can then be used to scroll between the models.
3. When Enter is pressed again, the model will be selected and the model selected.
   Note: A Reset to Factory Defaults will all rerun the console to UR model setting

D. Sound Setup

1. When Enter is pressed on this menu choice, the message display will display "SOUND ON" or "SOUND OFF", depending on the setting

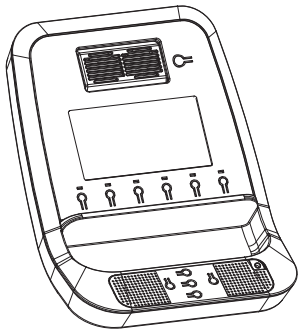
900Ub.Sr Service Menus (Continued)

2. The Up/Down keys can then be used to scroll between the two
3. If Enter is pressed while “SOUND ON” is shown on the display, the console beeper will be active.
4. If Enter is pressed while “SOUND OFF” is shown on the display, the console beeper will be disabled. No sound at all will come from the console in any mode or when any key is pressed.
5. Once Enter is pressed and the beeper will start or stop beeping depending on what was selected and the console will return to the Idle Mode.
   Note: A Reset to Factory Defaults will always return the console to “sound on”.

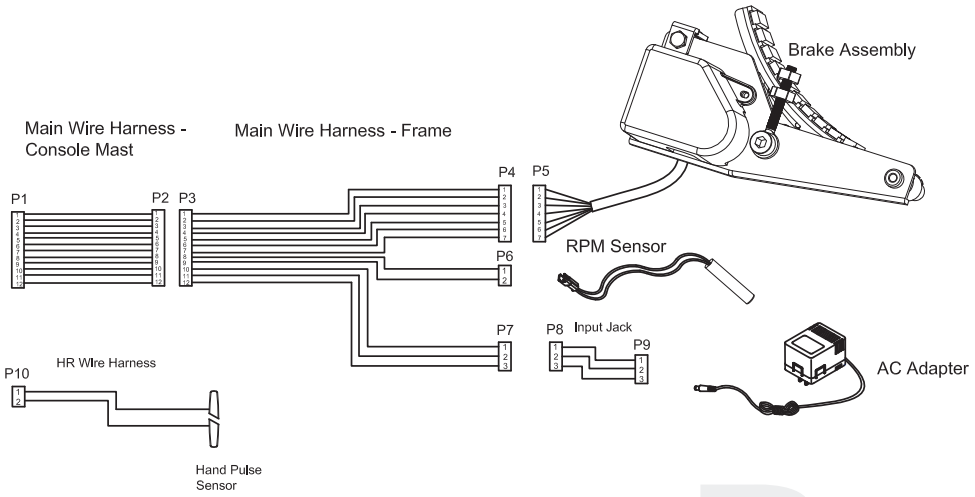
E. Reset to Factory Defaults

1. When Enter is pressed on this menu choice, the message display will show “FACTORY RST = NO”
2. Use the Up/Down keys to scroll between “YES” and “NO”.
3. If Enter is pressed on the “YES” choice, the console will reset all memory locations to factory defaults. The model setting will change to UR, Age will rest to 35years, the Weight will reset to 155lbs, the Custom Trainer profile will reset to its default profile
4. If “NO” is chosen, console will return to Idle Mode without resetting anything.
   Note: Performing a Reset to Factory Defaults will NOT reset the Total Console Hours value inside the Service Menu.

500Ub Wiring Diagram

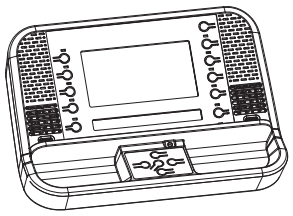


500Ub Console

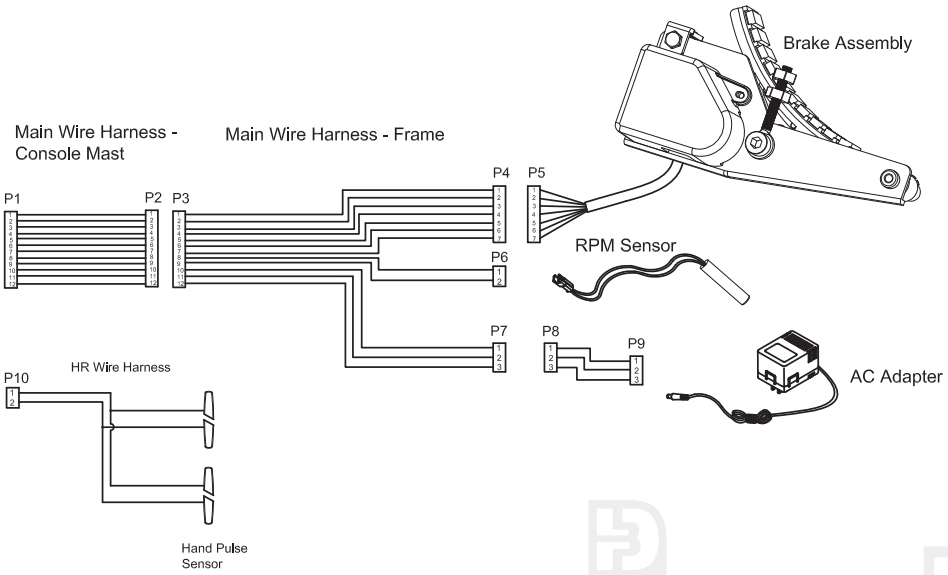


Signal Name	Signal Level	Color	From	TO
Motor -	0V, 3V, during level increase	Black	P1-2	P2-1 P3-1 P4-1 P5-1
Motor +	0V, 3V, during level increase	Red	P1-1	P2-2 P3-2 P4-2 P5-2
+10K -VR	3VDC	Yellow	P1-5	P2-3 P3-3 P4-3 P5-3
Position -VR	0.05 - 1.06VDC	Blue	P5-4	P4-4 P3-4 P2-4 P1-4
GND -VR	0	Green	P1-3	P2-5 P3-5 P4-5 P5-5
VR1	2.7 - 2.9VDC	Orange	P1-6	P2-6 P3-6 P4-6 P5-6
VR2	1.5 - 2.7VDC	Grey	P1-7	P2-7 P3-7 P4-7 P5-7
RPM	0V W/Magnet 3VDC w/o Magment	White	RPM Sensor	P6-1 P3-8 P2-8 P1-8
		Brown	RPM Sensor	P6-2 P3-9 P2-9 P1-9
VCC	9V DC	Pink	P9-1	P8-1 P7-1 P3-10 P2-10 P1-10
GND	0V	Reseda	P9-2	P8-2 P7-2 P3-11 P2-11 P1-11
COM	0V	Purple	P9-3	P8-3 P7-3 P3-12 P2-12 P1-12
HR		Black	HGP Sensor	P10-1
HR COM		Black/White	HGP Sensor	P10-2

900Ub Wiring Diagram



900Ub Console



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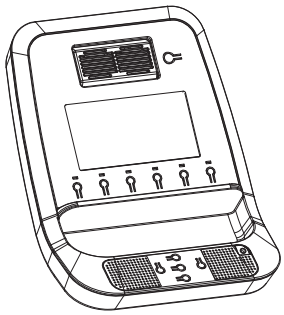
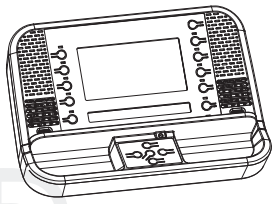
+10K -VR	3VDC	Yellow	P1-5	P2-3 P3-3 P4-3 P5-3
Position -VR	0.05 - 1.06VDC	Blue	P5-4	P4-4 P3-4 P2-4 P1-4
GND -VR	0	Green	P1-3	P2-5 P3-5 P4-5 P5-5
VR1	2.7 - 2.9VDC	Orange	P1-6	P2-6 P3-6 P4-6 P5-6
VR2	1.5 - 2.7VDC	Grey	P1-7	P2-7 P3-7 P4-7 P5-7
RPM	0V W/Magnet 3VDC w/o Magment	White	RPM Sensor	P6-1 P3-8 P2-8 P1-8
		Brown	RPM Sensor	P6-2 P3-9 P2-9 P1-9
VCC	9V DC	Pink	P9-1	P8-1 P7-1 P3-10 P2-10 P1-10
GND	0V	Reseda	P9-2	P8-2 P7-2 P3-11 P2-11 P1-11
COM	0V	Purple	P9-3	P8-3 P7-3 P3-12 P2-12 P1-12
HR		Black	HGP Sensor	P10-1
HR COM		Black/White	HGP Sensor	P10-2

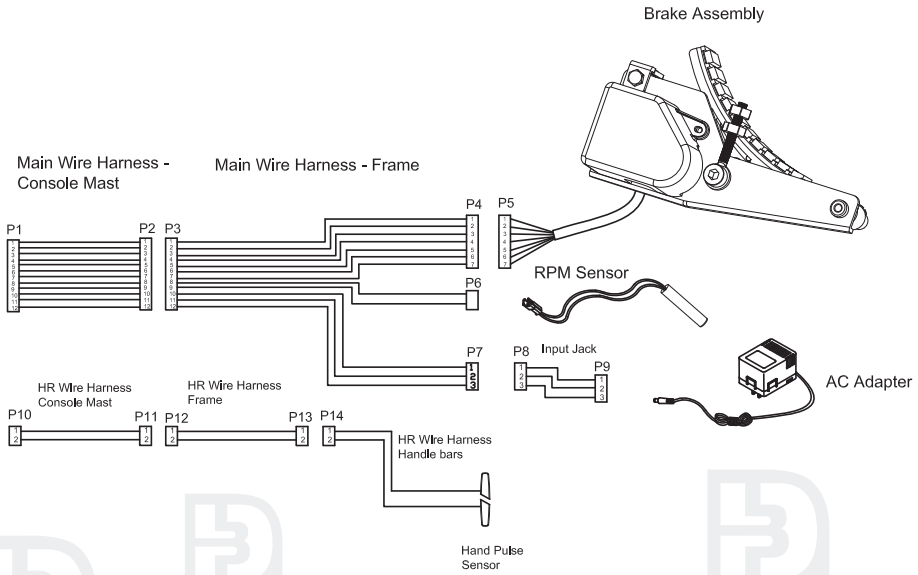
500Sr & 900Sr Wiring Diagram



500Sr Console



900Sr Console



Signal Name	Signal Level	Color	From	TO
Motor -	0V, 3V, during level increase	Black	P1-2	P2-1 P3-1 P4-1 P5-1
Motor +	0V, 3V, during level increase	Red	P1-1	P2-2 P3-2 P4-2 P5-2
+10K -VR	3VDC	Yellow	P1-5	P2-3 P3-3 P4-3 P5-3
Position -VR	0.05 - 1.06VDC	Blue	P5-4	P4-4 P3-4 P2-4 P1-4
GND -VR	0	Green	P1-3	P2-5 P3-5 P4-5 P5-5
VR1	2.7 - 2.9VDC	Orange	P1-6	P2-6 P3-6 P4-6 P5-6
VR2	1.5 - 2.7VDC	Grey	P1-7	P2-7 P3-7 P4-7 P5-7
RPM	0V W/Magnet 3VDC w/o Magment	White	RPM Sensor	P6-1 P3-8 P2-8 P1-8
		Brown	RPM Sensor	P6-2 P3-9 P2-9 P1-9
VCC	9V DC	Pink	P9-1	P8-1 P7-1 P3-10 P2-10 P1-10
GND	0V	Reseda	P9-2	P8-2 P7-2 P3-11 P2-11 P1-11
COM	0V	Purple	P9-3	P8-3 P7-3 P3-12 P2-12 P1-12
HR		Black	HGP Sensor	P14-1 P13-1 P12-1 P11-1 P10-1
HR COM		Black/White	HGP Sensor	P14-2 P13-2 P12-2 P11-2 P10-2

500Ub Parts List

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161	22-50-161	Crank Arm Hex Bolt	59
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173	22-50-173	Idler Assembly	65
175	22-50-175	Speed Sensor	66
177	22-90-177	Input Jack	67
179	22-50-179	Handle Bar Adjustment Knob & Hardware	68
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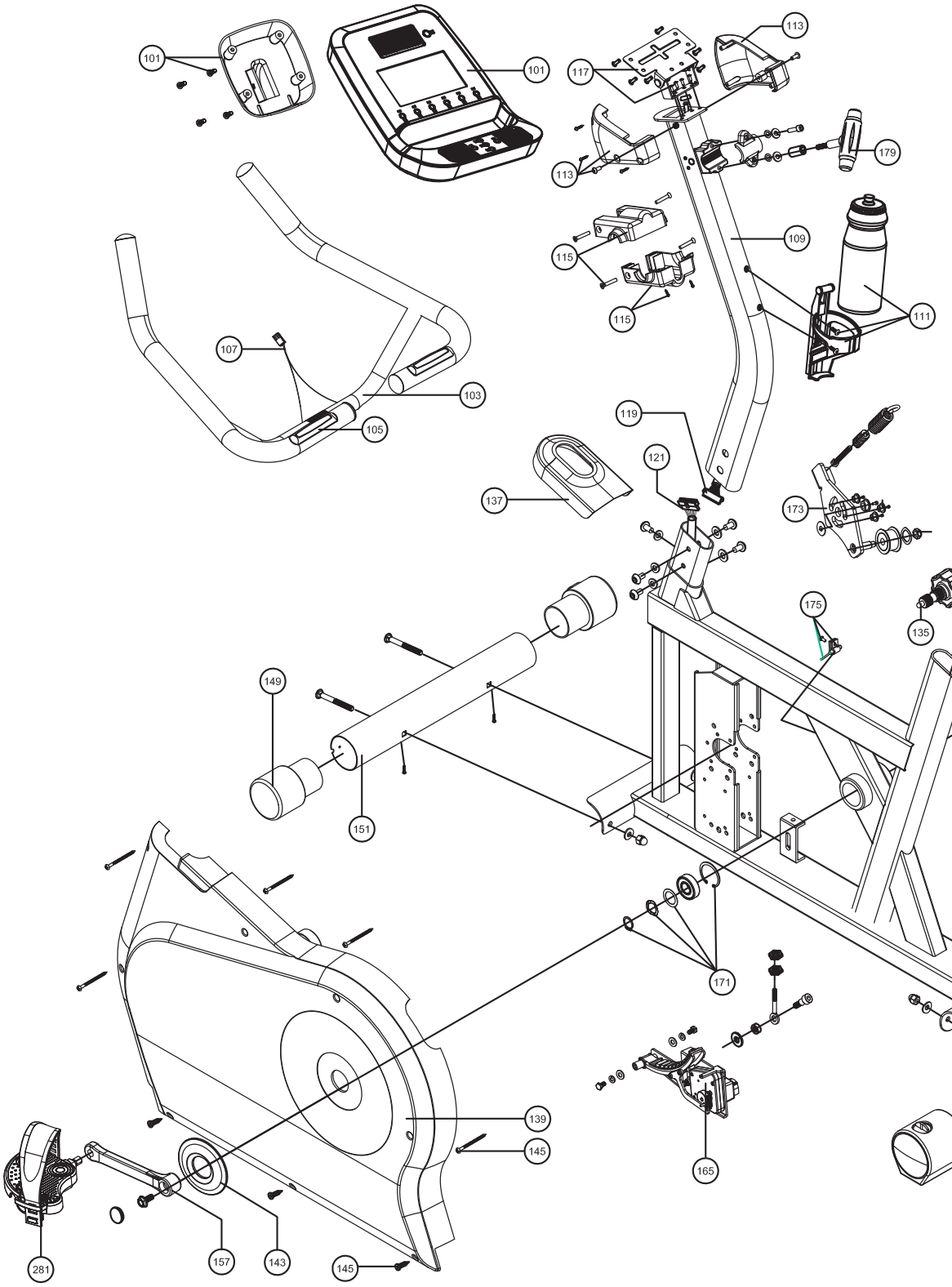
281	22-50-281	Pedals & Straps	70
354	22-09-354	AC Adapter	71
900	22-50-900	Owner's Manual	-
183	22-50-183	Assembly Hardware Kit	-

500Ub Explo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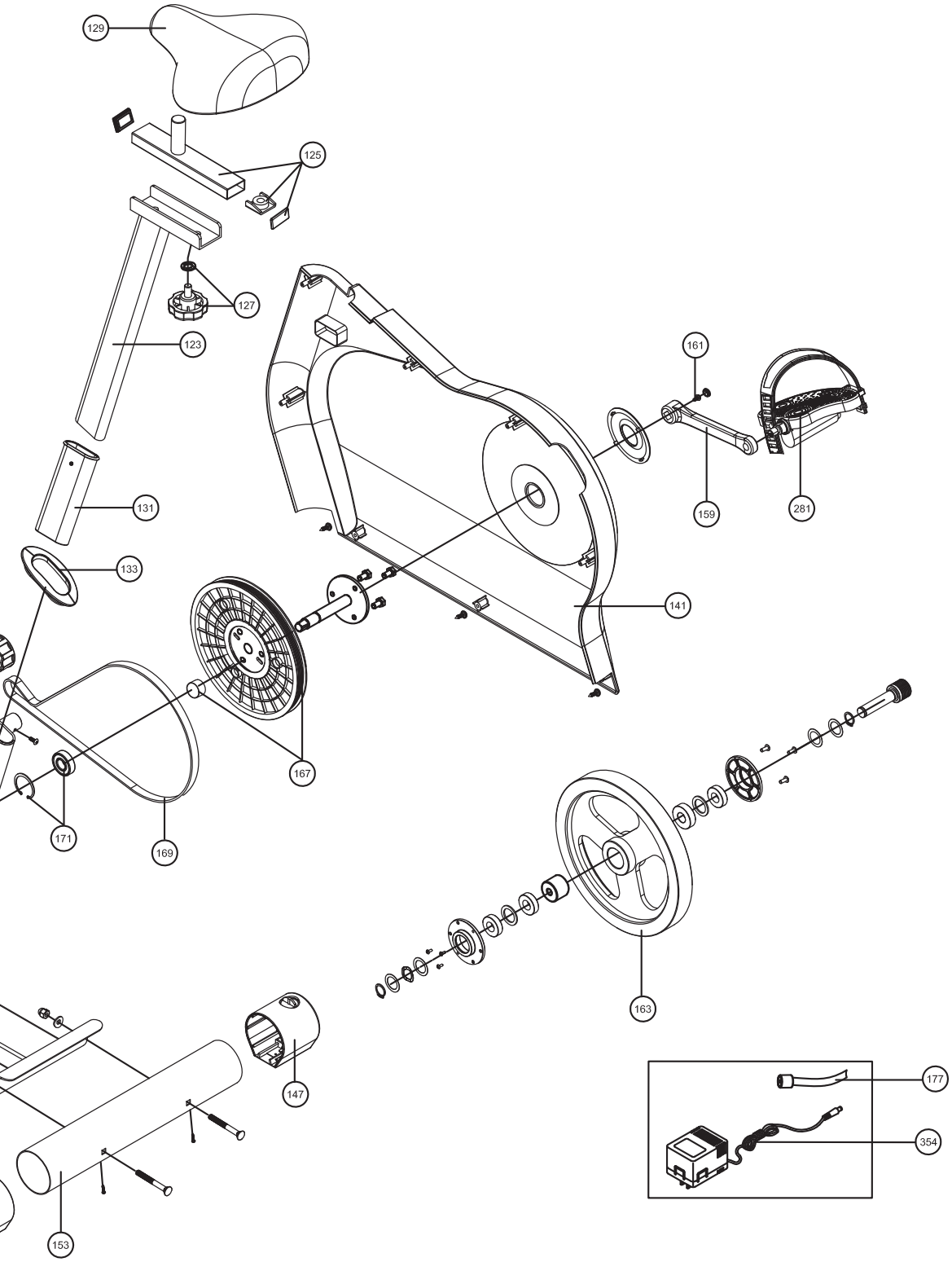
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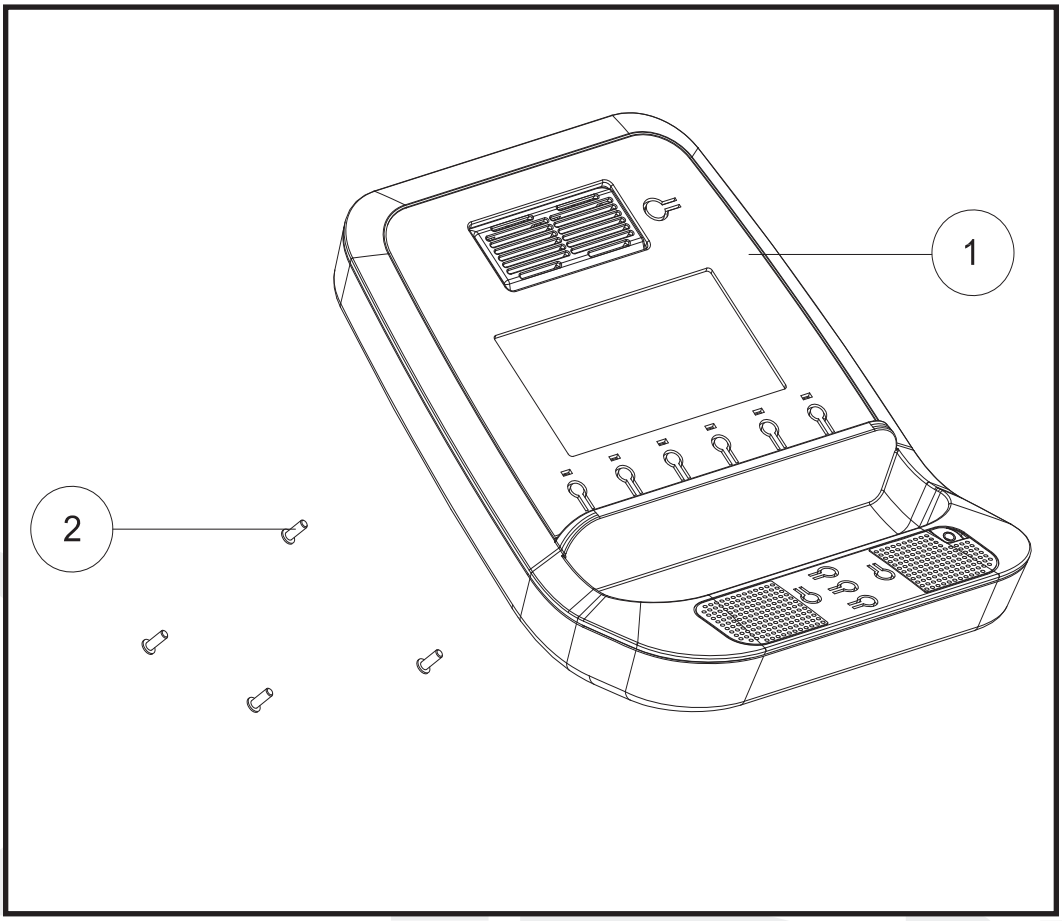
22-50-101

Console Assembly

500Ub/500Sr

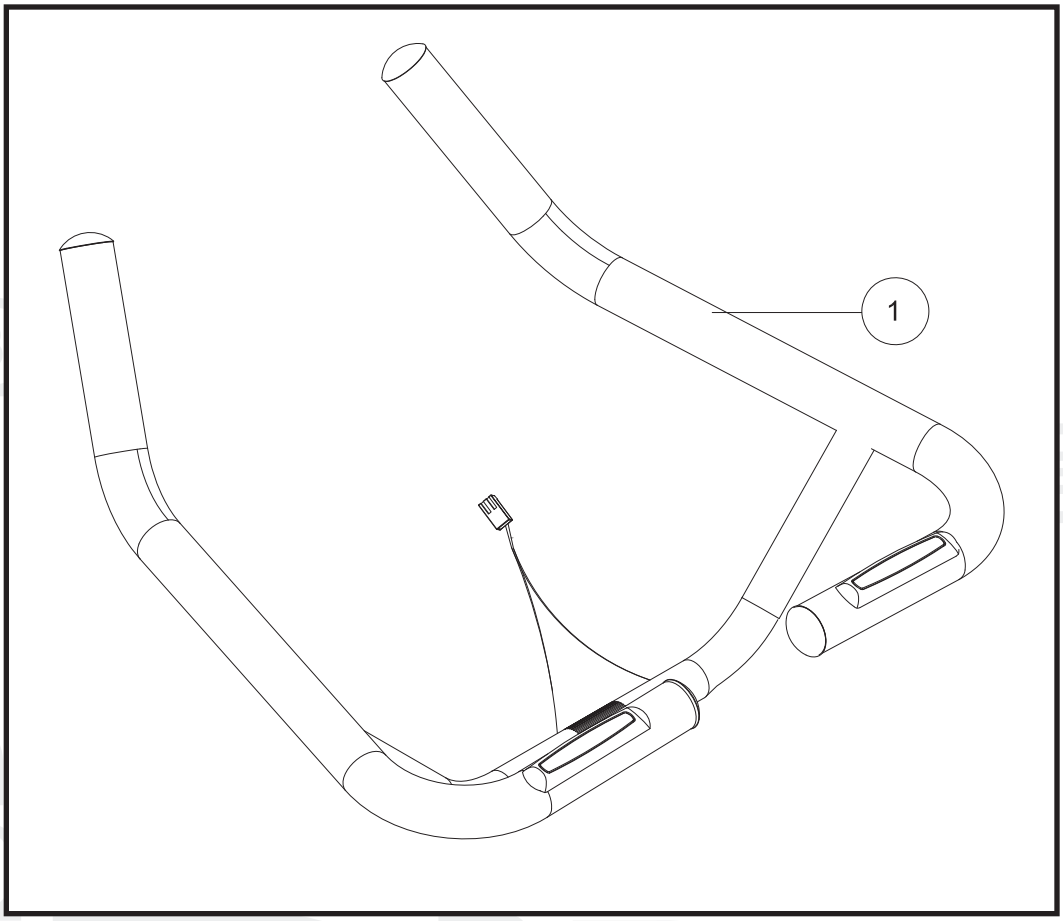


Description	Quantity	Item Number
Console assembly	1	1
Screw M5 x 10mm	4	2

22-50-103

Handle Bar Assembly

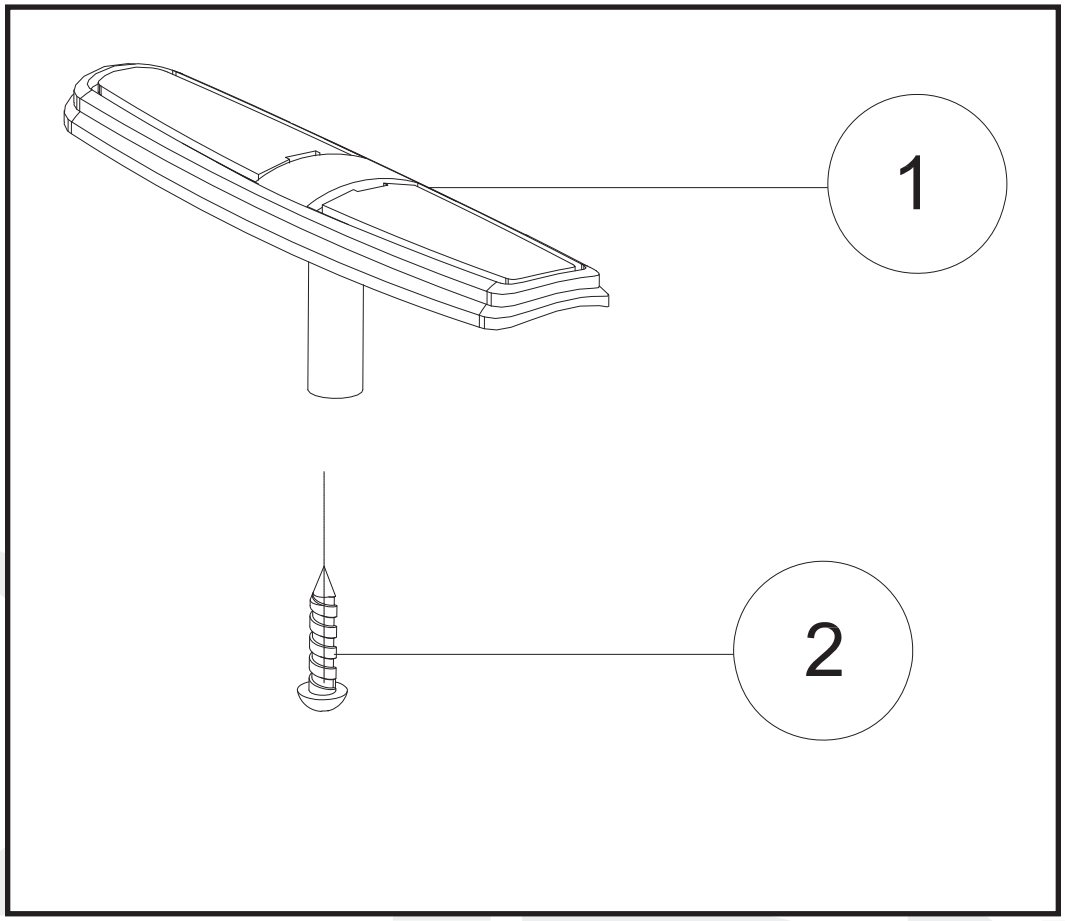
500Ub



Description	Quantity	Item Number
Handle Bar Assembly	1	1

22-50-105

HP Sensors
500Ub/Sr & 900Ub

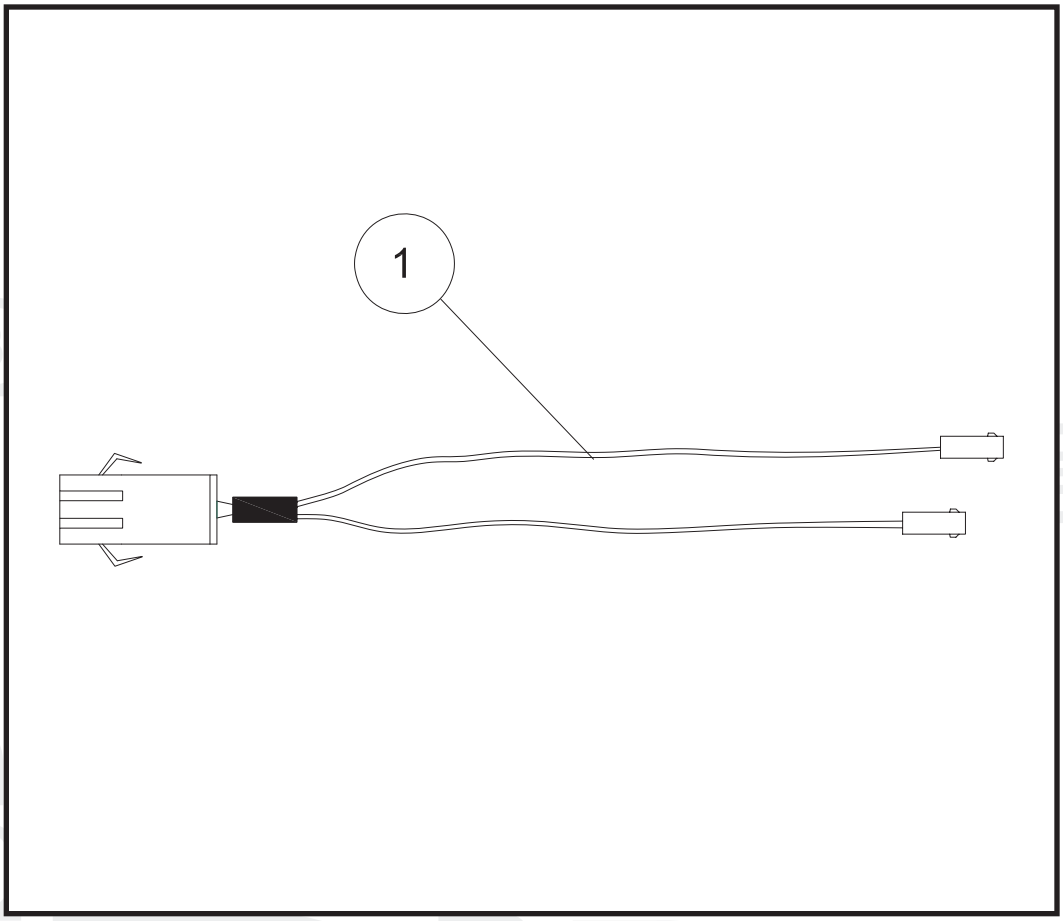


Description	Quantity	Item Number
HP Sensor	2	1
Screw M3 x 20mm	2	2

22-50-107

HR Wire Harness - Handle Bar

500Ub

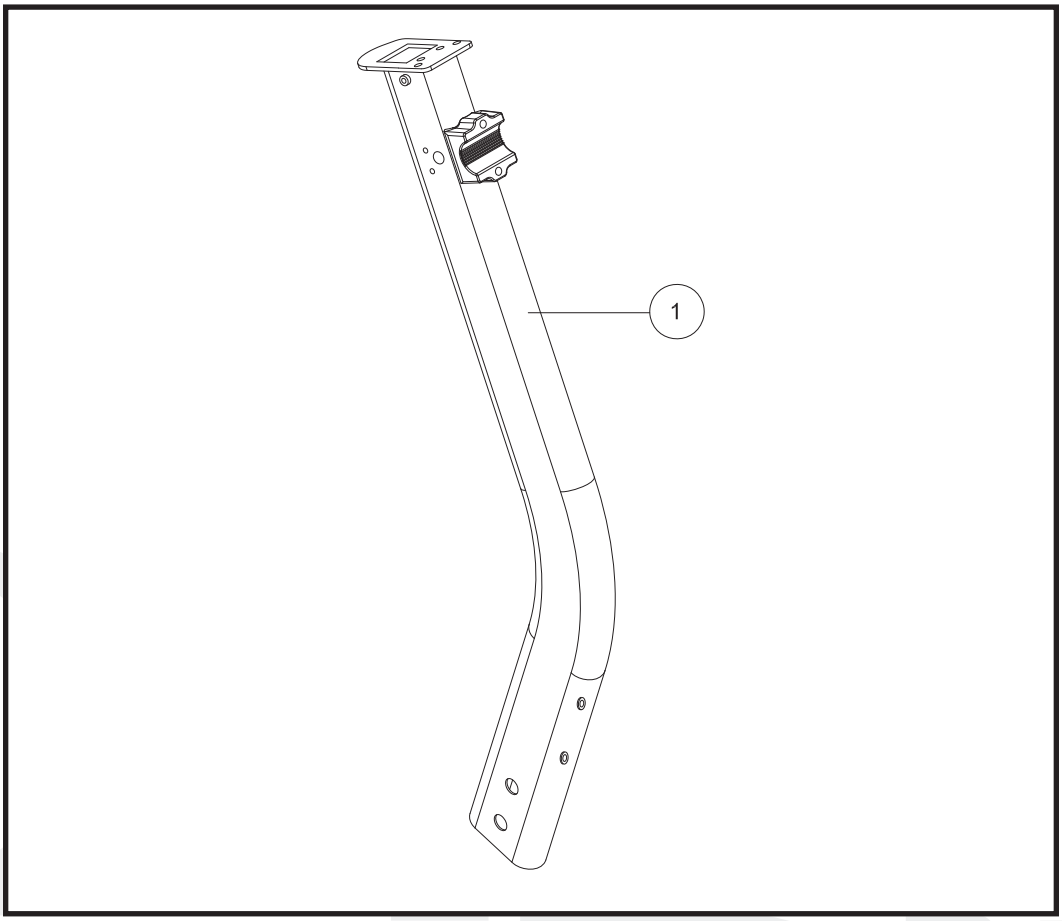


Description	Quantity	Item Number
HR Wire Harness Handle Bar	1	1

22-50-109

Console Mast

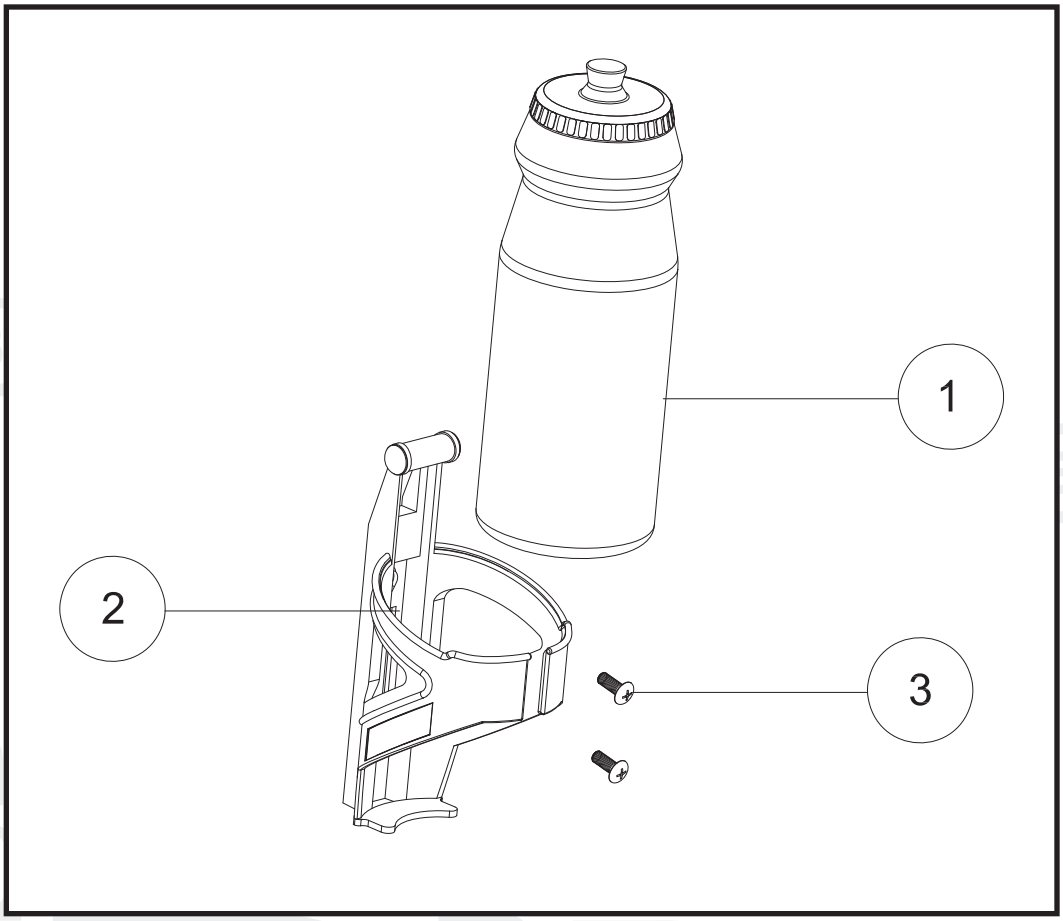
500Ub



Description	Quantity	Item Number
Console Mast	1	1

22-50-111

Water Bottle Set
500Ub/Sr & 900Ub

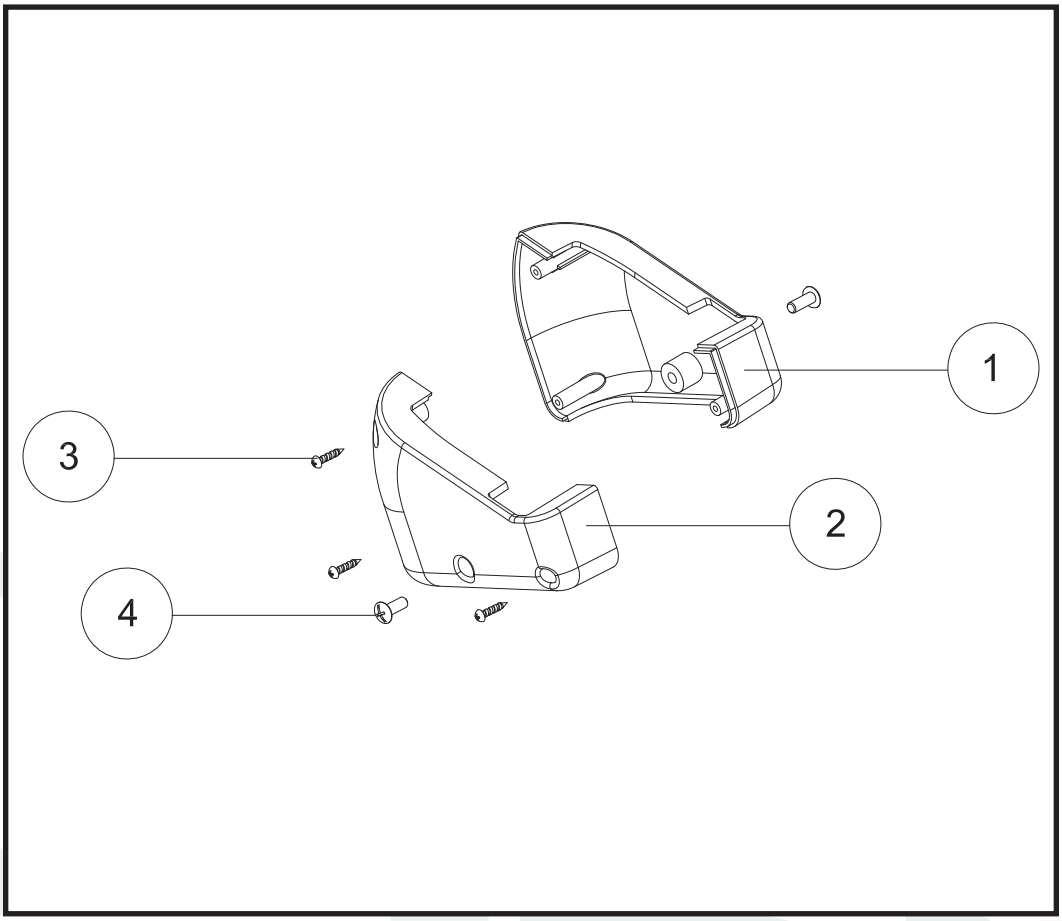


Description	Quantity	Item Number
Water bottle	1	1
Cage	1	2
Screws M4 x 14mm	2	3

22-50-113

Console Mount Covers

500Ub/Sr

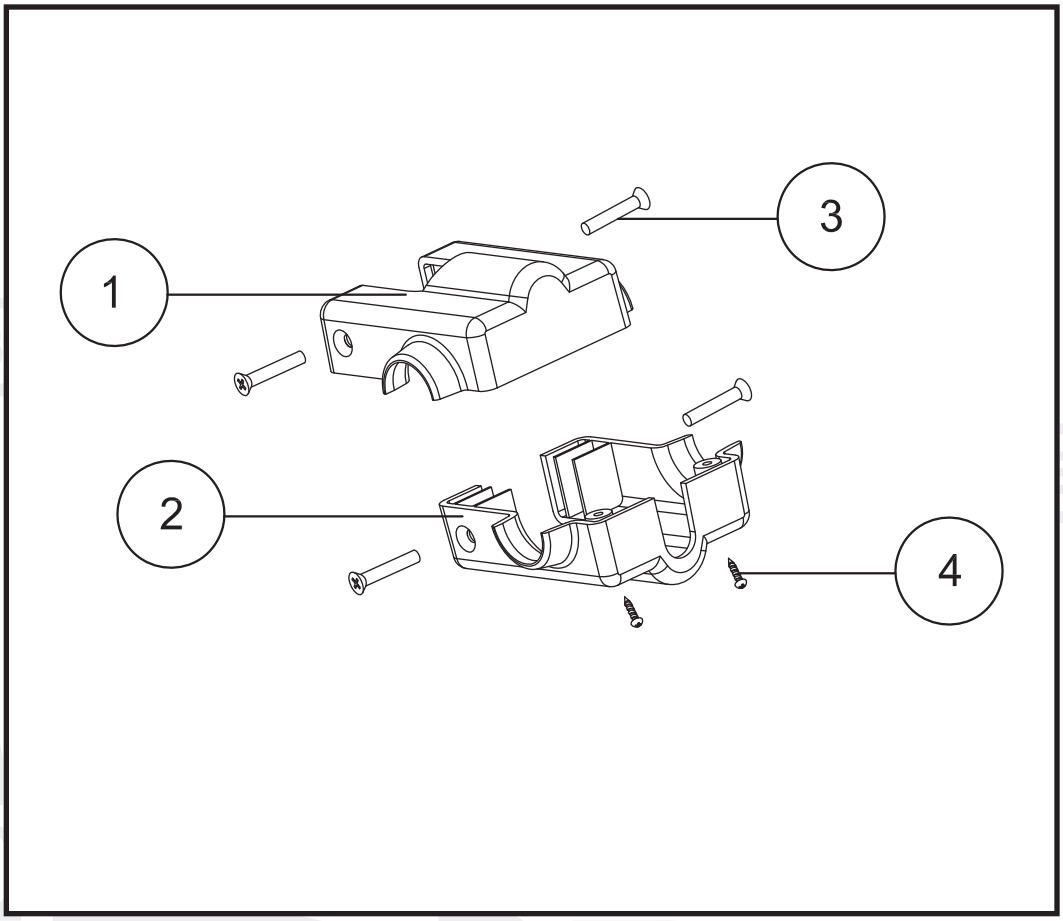


Description	Quantity	Item Number
Right Console Mount Cover	1	1
Left Console Mount Cover	1	2
Screws M3 x 14mm	3	3
Screws M5 x 14mm	2	4

22-50-115

Handle Bar Covers

500Ub

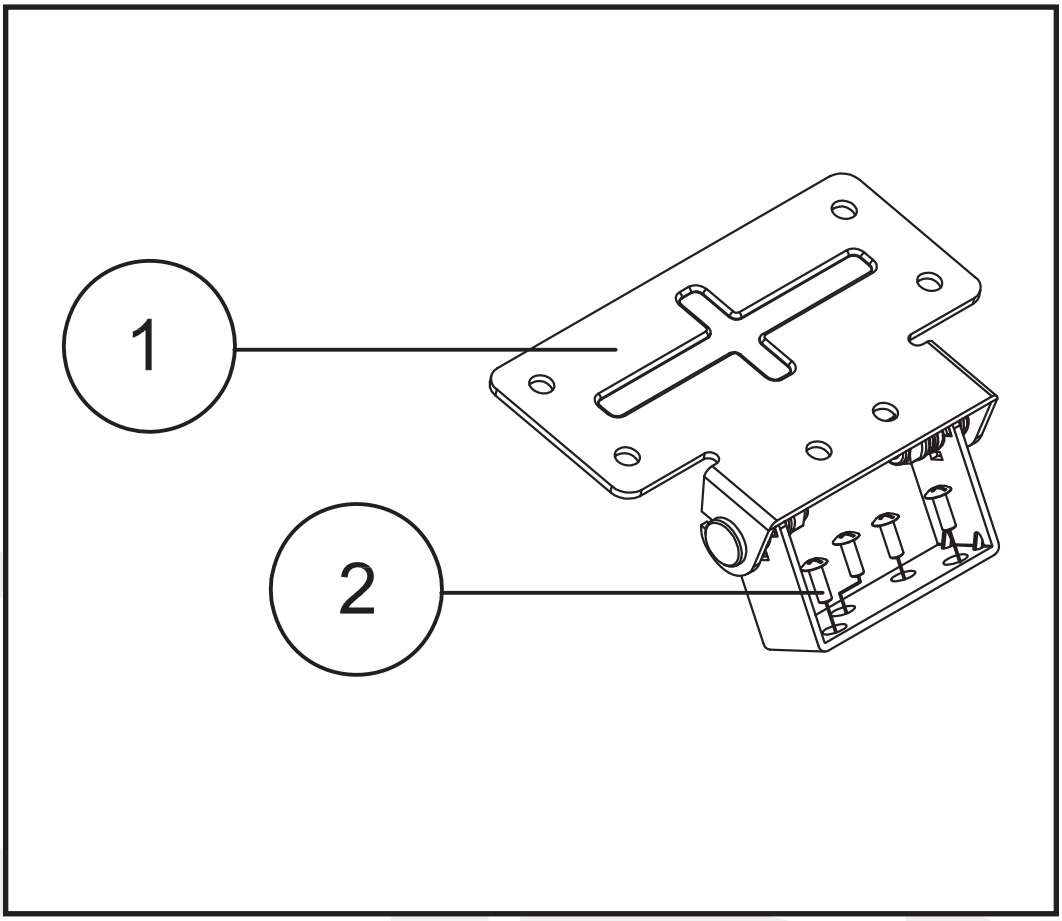


Description	Quantity	Item Number
Top Handle Bar Cover	1	
Bottom Handle Bar Cover	1	
Screws M5 x 25mm	4	
Screws M3 x 14mm	2	

22-50-117

Console Mount Bracket

500Ub/Sr & 900Ub/Sr

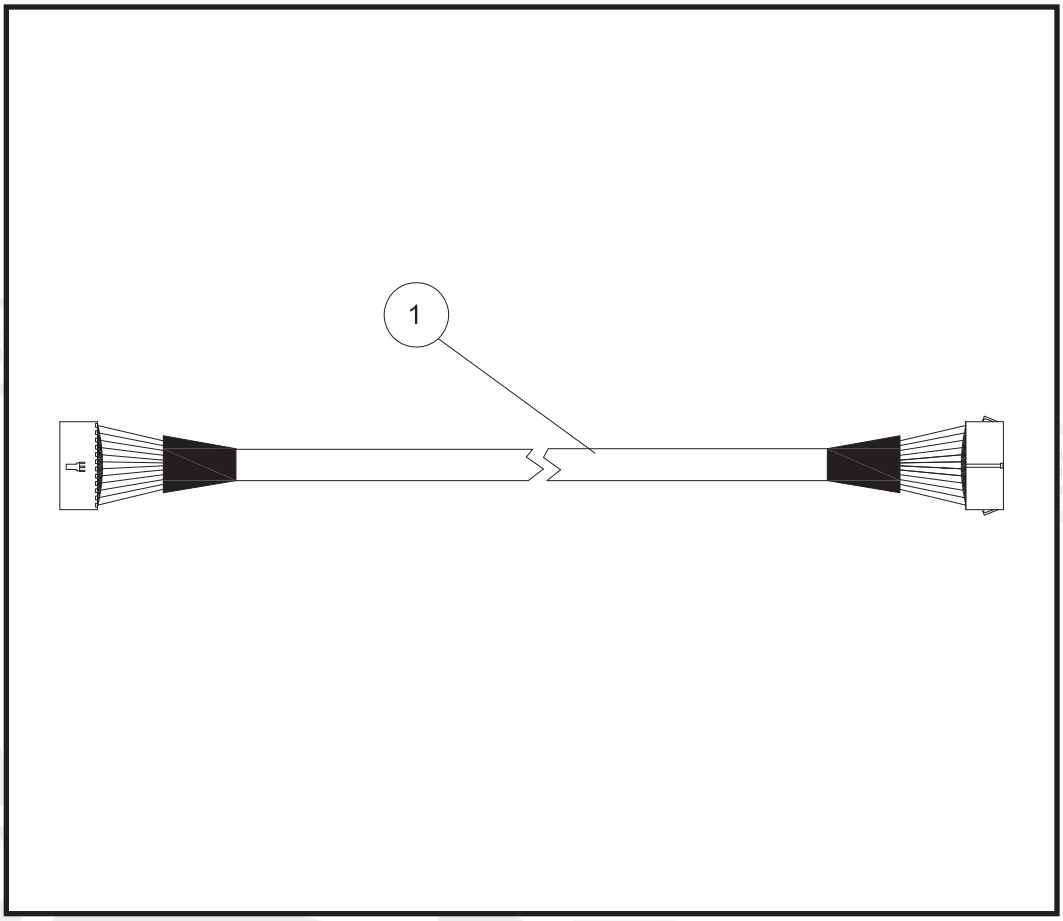


Description	Quantity	Item Number
Console Mount Bracket	1	1
Screws M5 x 10mm	4	2

22-50-119

Main Wire Harness - Console Mast

500Ub & 900Ub

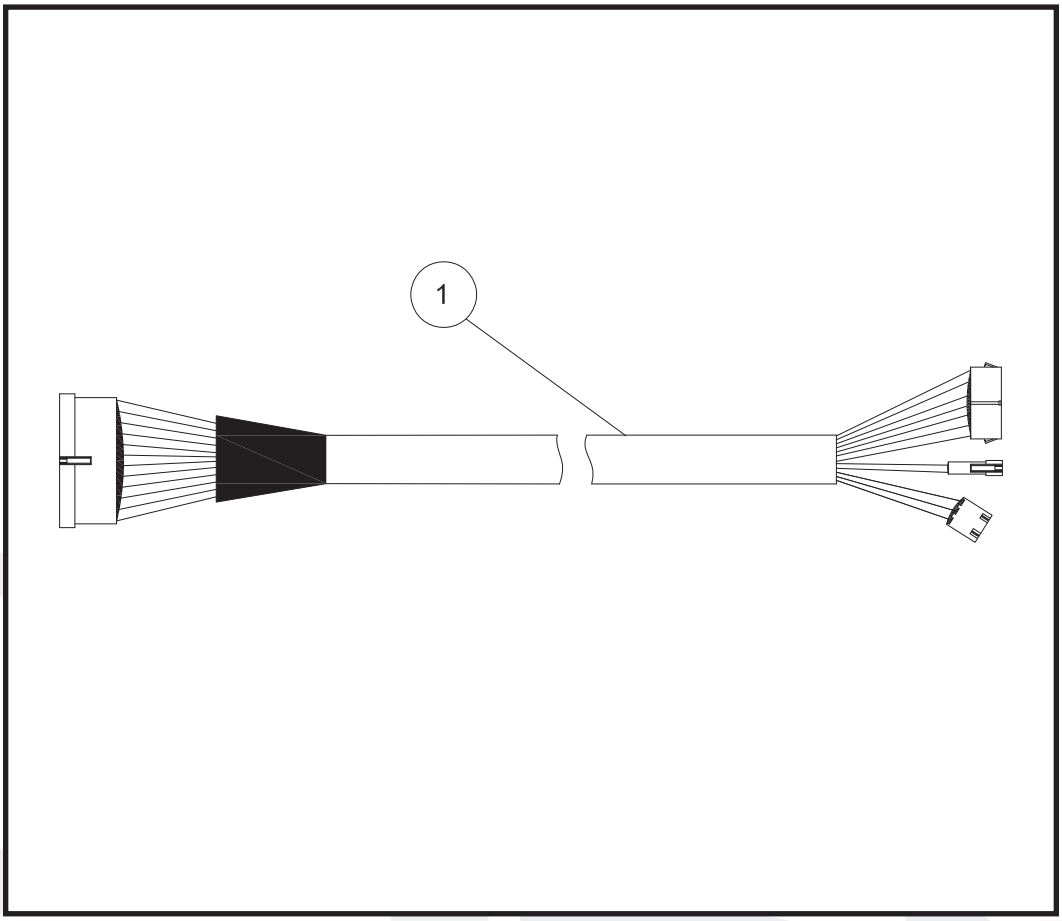


Description	Quantity	Item Number
Main Wire Harness - Console Mast	1	1

22-50-121

Main Wire Harness - Frame

500Ub

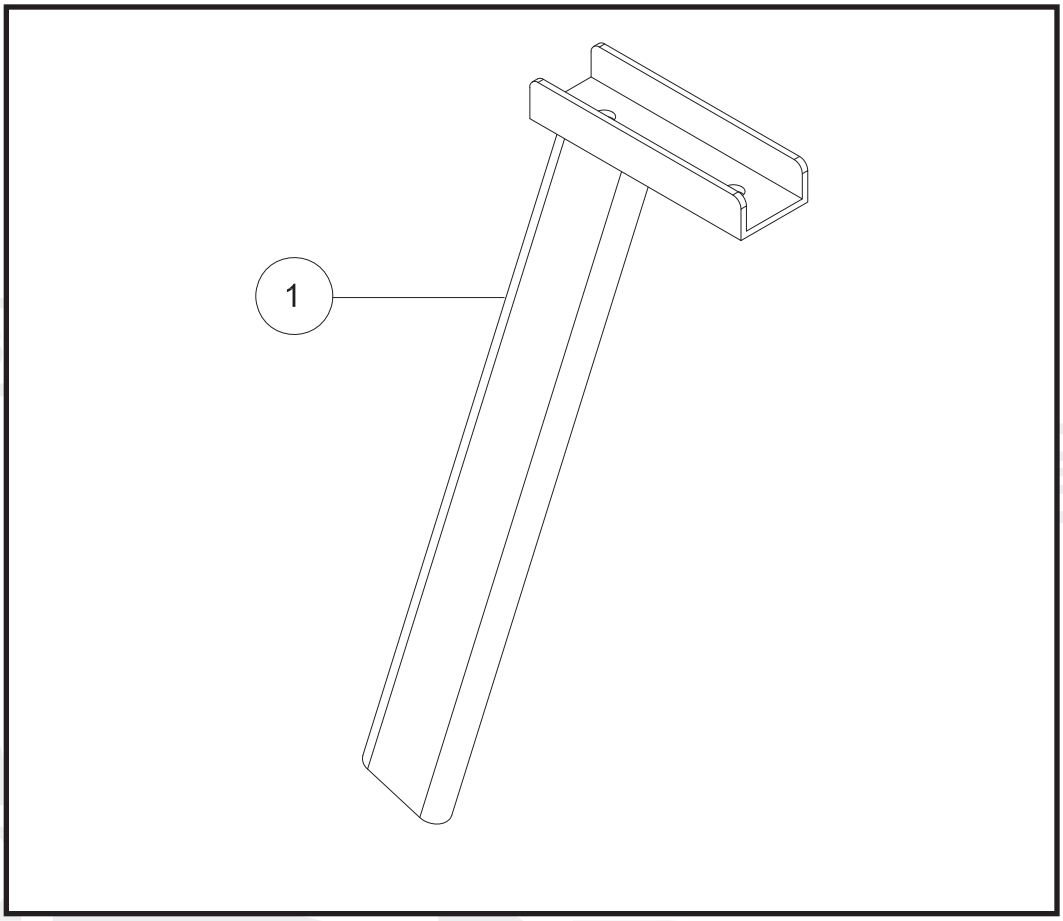


Description	Quantity	Item Number
Main Wire Harness - Frame	1	1

22-50-123

Seat Post

500Ub

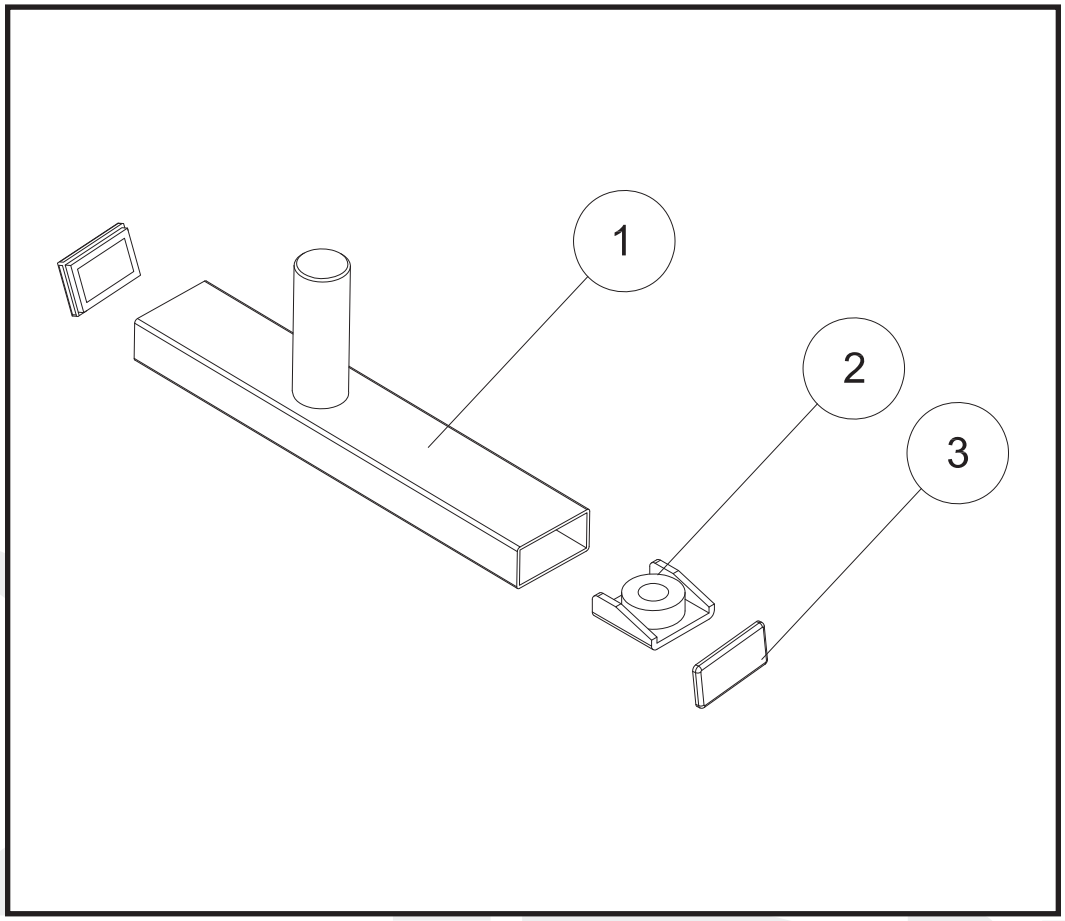


Description	Quantity	Item Number

22-50-125

Seat Slide Adjuster

500Ub

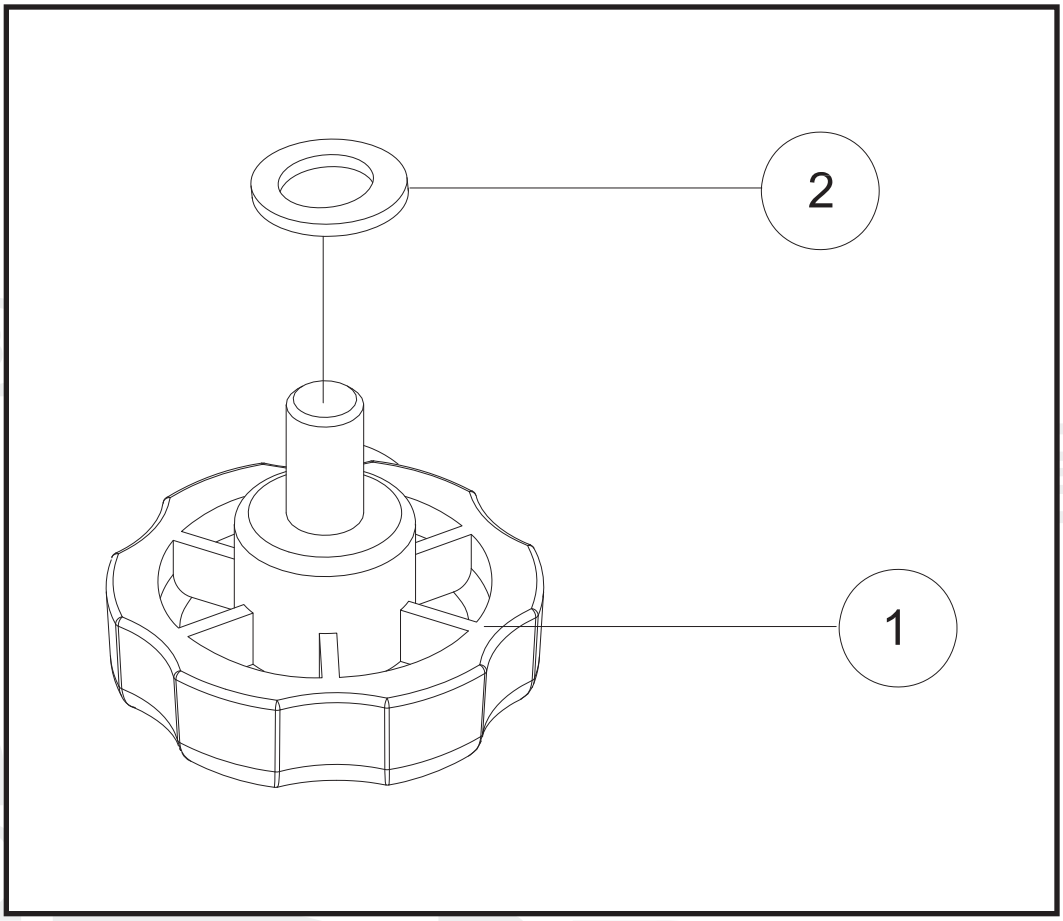


Description	Quantity	Item Number
Seat Support	1	1
Locking Bracket	1	2
End Cap	2	3

22-50-127

Seat Slide Knob

500Ub

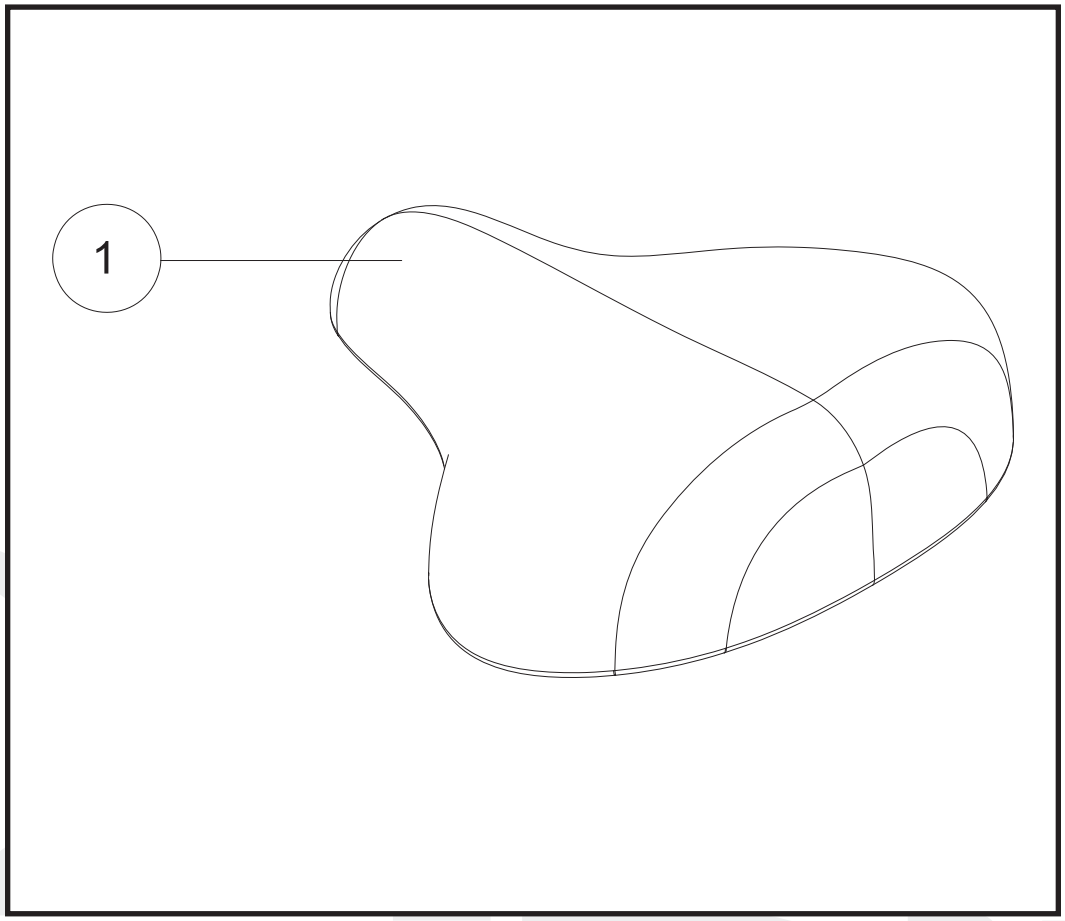


Description	Quantity	Item Number
Knob	1	1
Flat Washer 14.3 x 25 x 2T	1	2

22-50-129

Saddle

500Ub

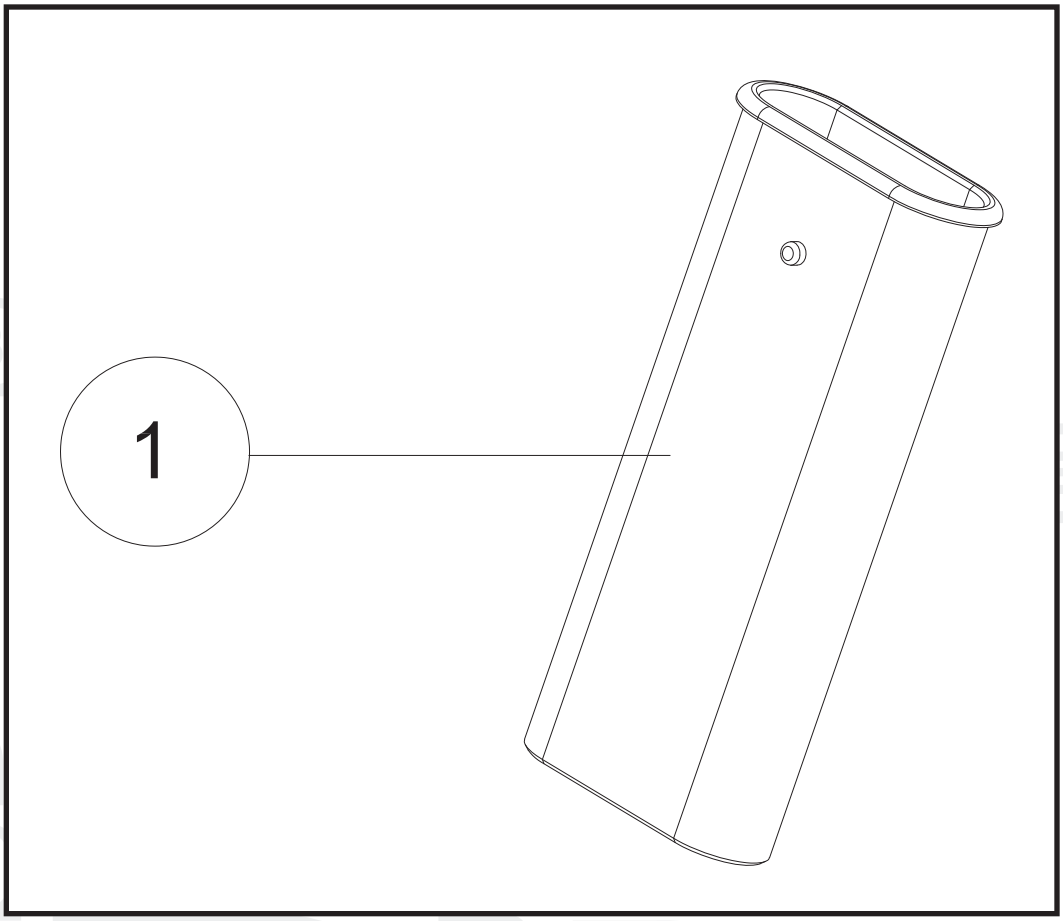


Description	Quantity	Item Number
Saddle	1	1

22-50-131

Seat Post bushing

500Ub

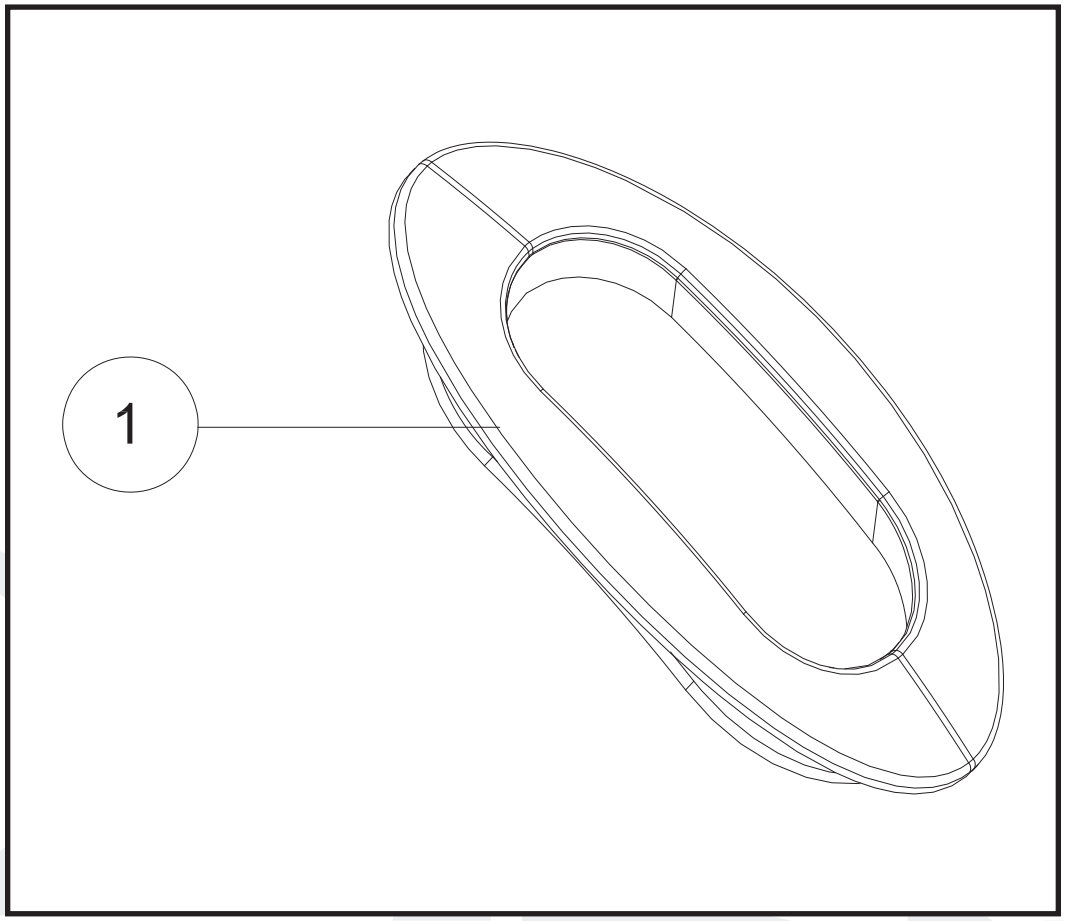


Description	Quantity	Item Number
Seat Post Bushing	1	1

22-50-133

Seat Post Cover

500Ub

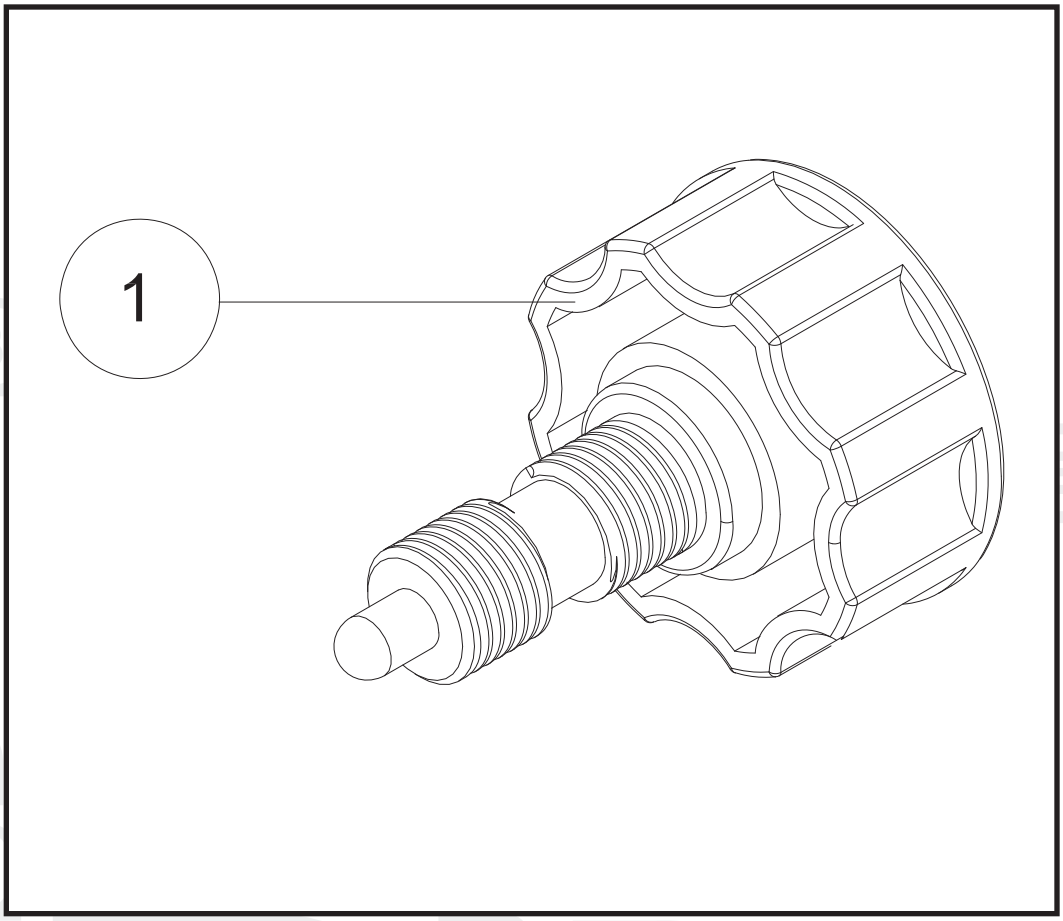


Description	Quantity	Item Number
Seat Post Cover	1	1

22-50-135

Seat Pin Assembly

500Ub

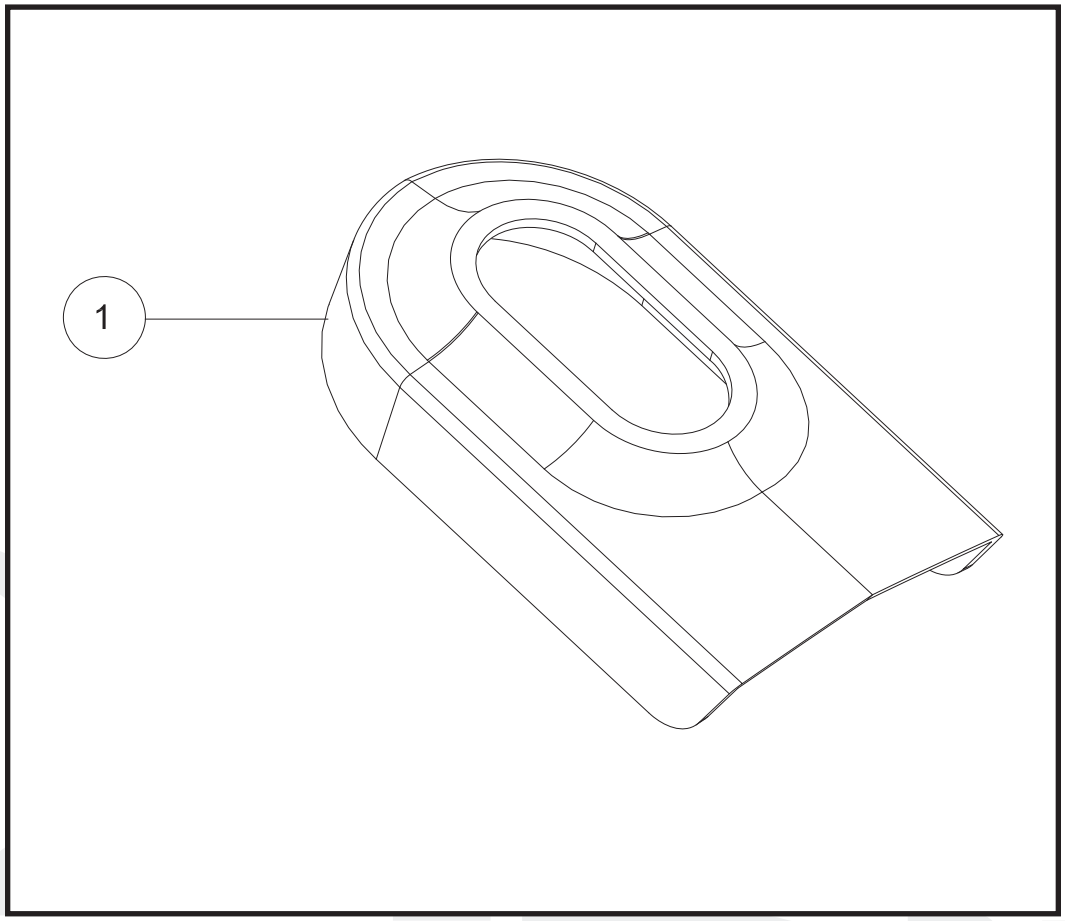


Description	Quantity	Item Number
Seat Pin Assembly	1	1

22-50-137

Console Mast Cover

500Ub

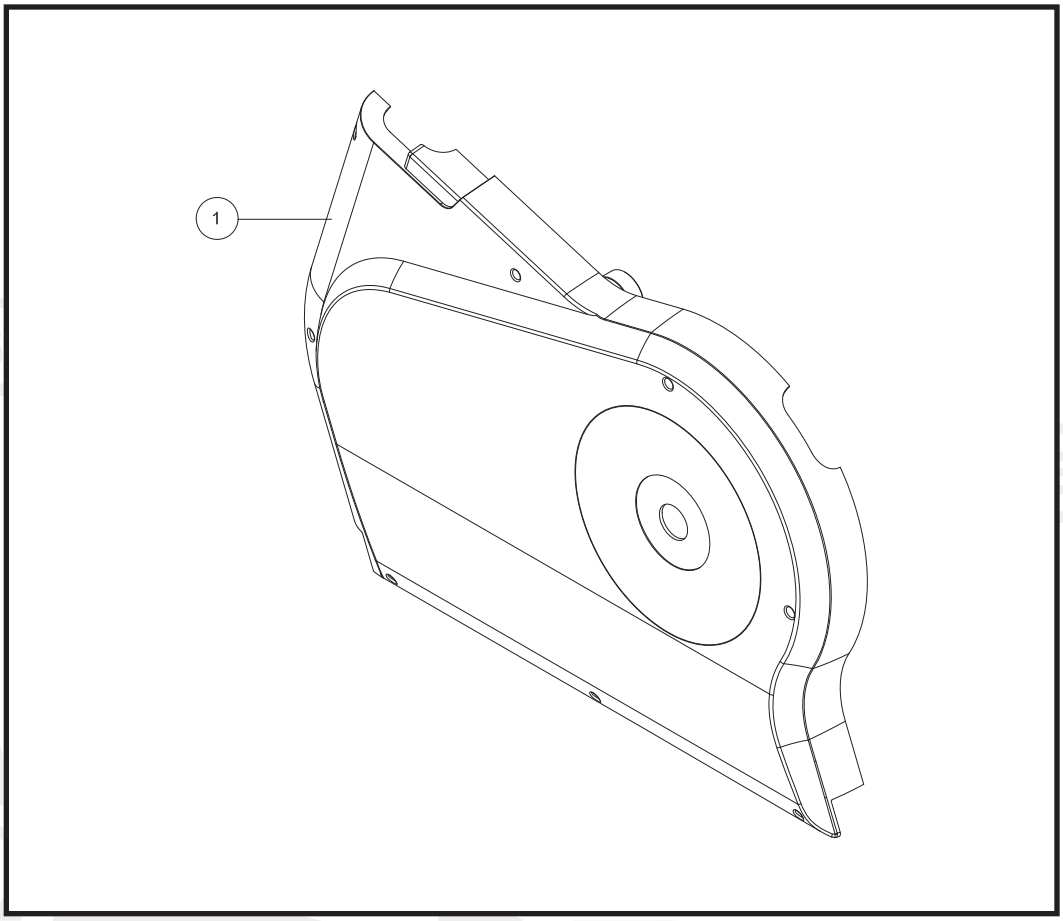


Description	Quantity	Item Number
Console Mast Cover	1	1

22-50-139

Left Sidecase

500Ub & 900Ub

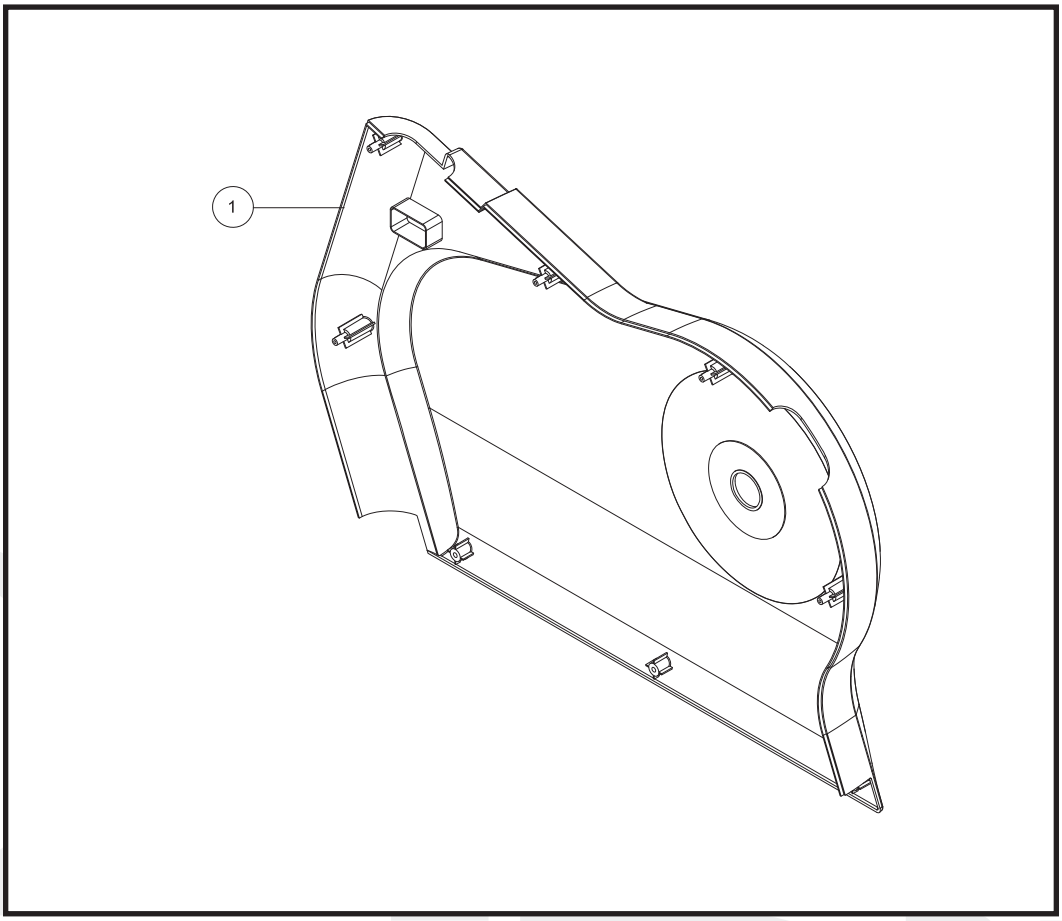


Description	Quantity	Item Number
Left Sidecase	1	1

22-50-141

Right Sidecase

500Ub & 900Ub

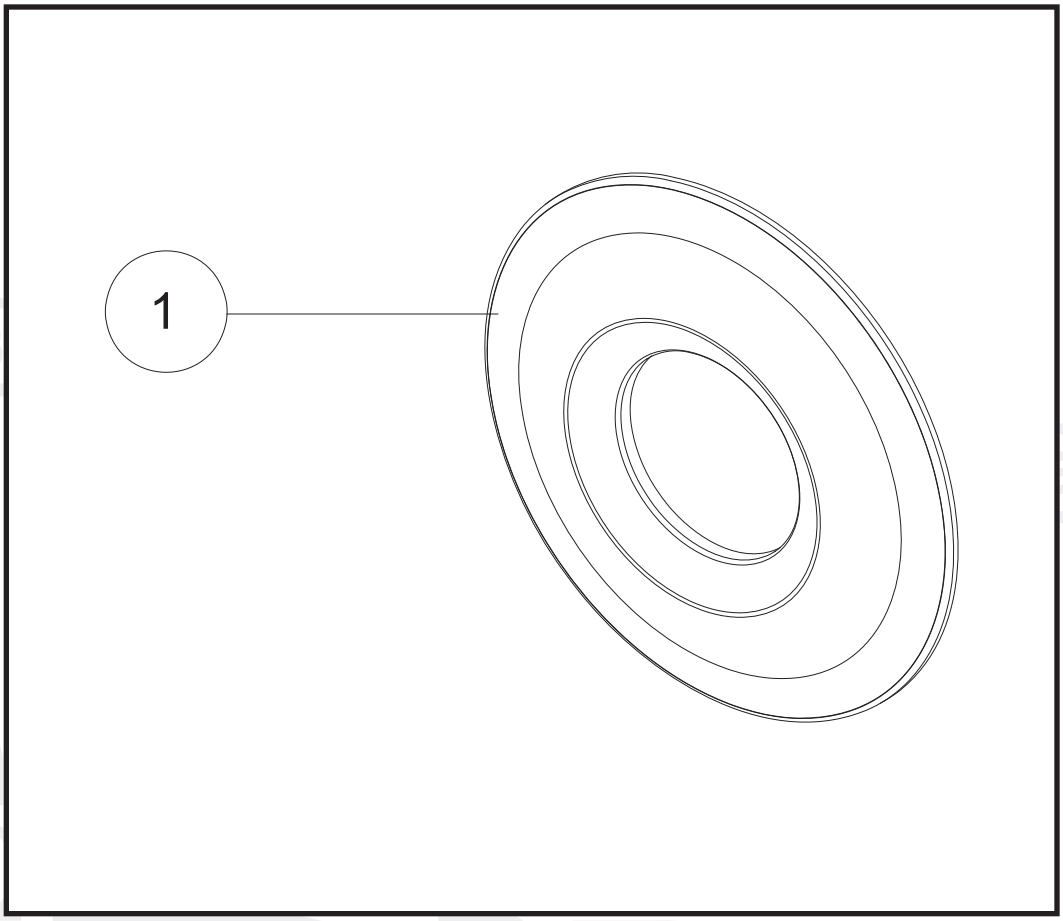


Description	Quantity	Item Number
Right Sidecase	1	1

22-50-143

Crank Arm Insert

500Ub/Sr & 900Ub/Sr

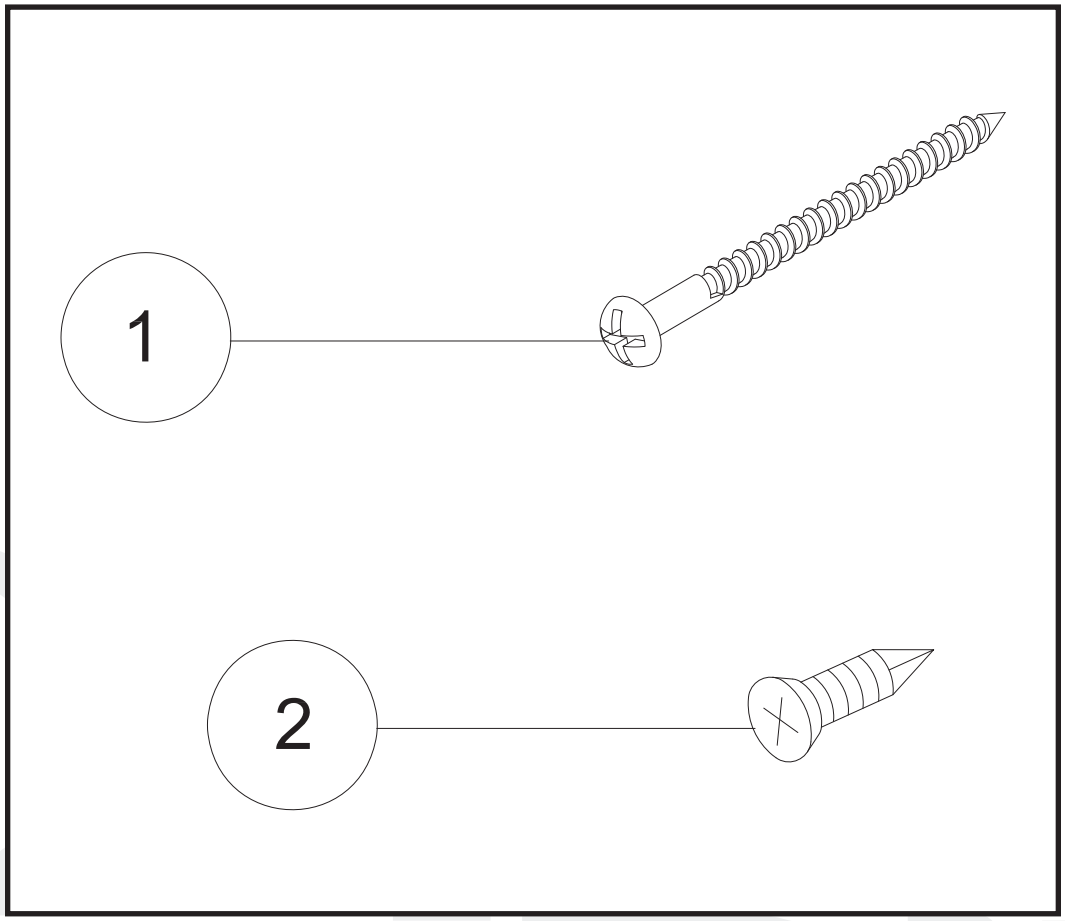


Description	Quantity	Item Number
Crank Arm Insert	1	1

22-50-145

Main Sidecase Bolt Kit

500Ub & 900Ub

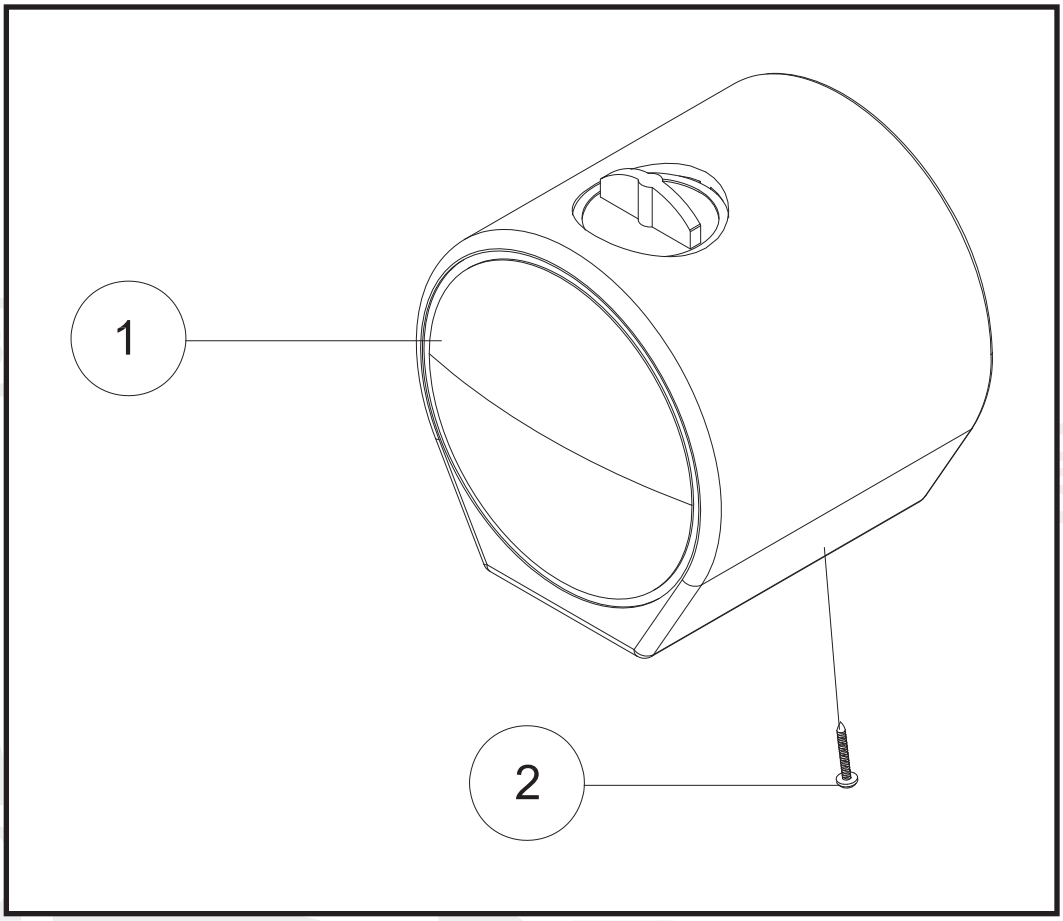


Description	Quantity	Item Number
Screw M4 x 50	5	1
Screw 3/16" x 3/4"	6	2

22-50-147

Leveling Caps

500Ub/Sr

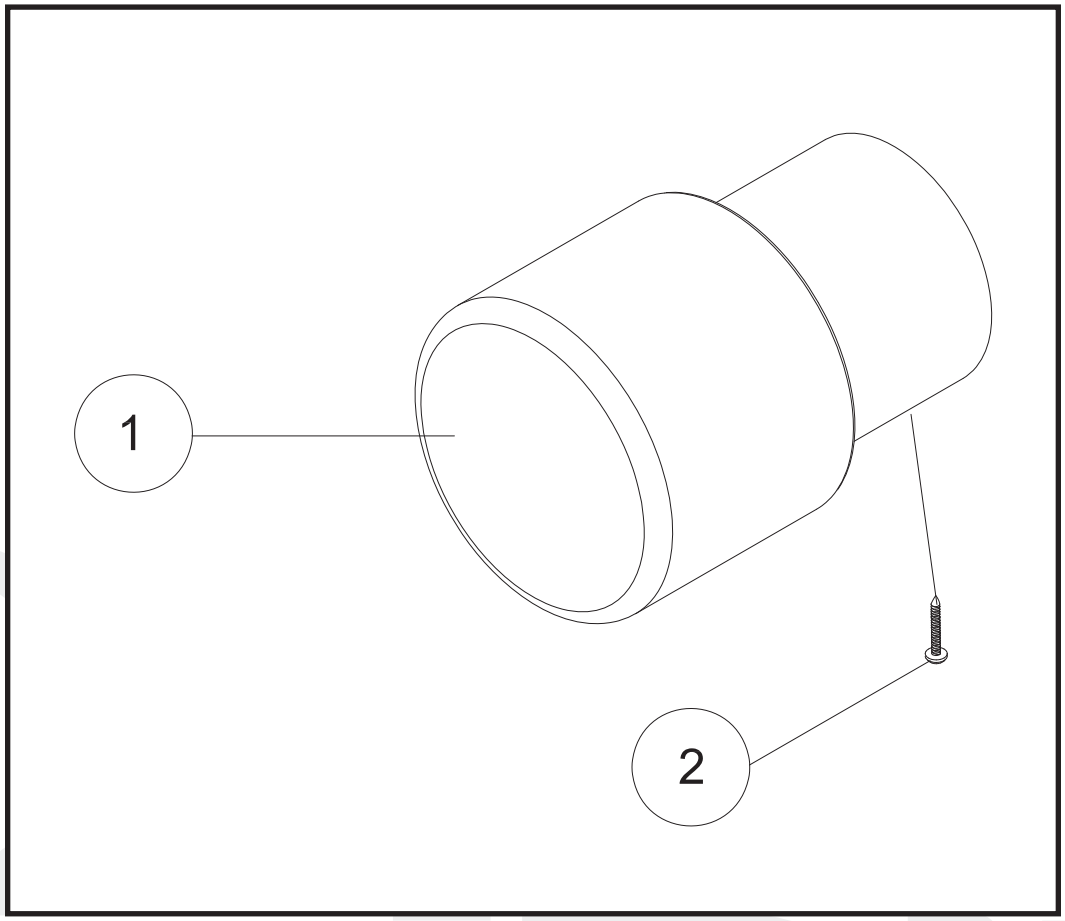


Description	Quantity	Item Number
Leveling Cap	2	1
Screw 3/16" x 3/4"	2	2

22-50-149

Transport Wheels

500Ub/Sr

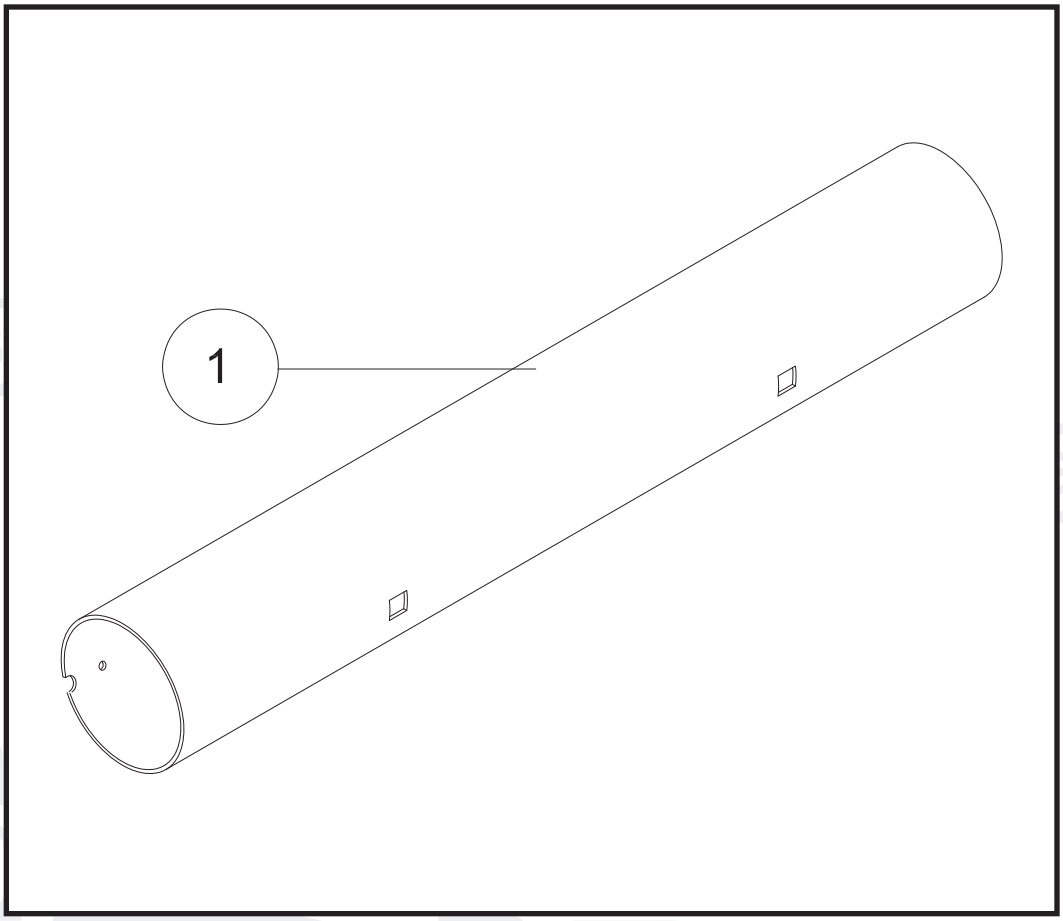


Description	Quantity	Item Number
Transport Wheel	2	1
Screw M3 x 8	2	2

22-50-151

Front Stabilizer

500Ub

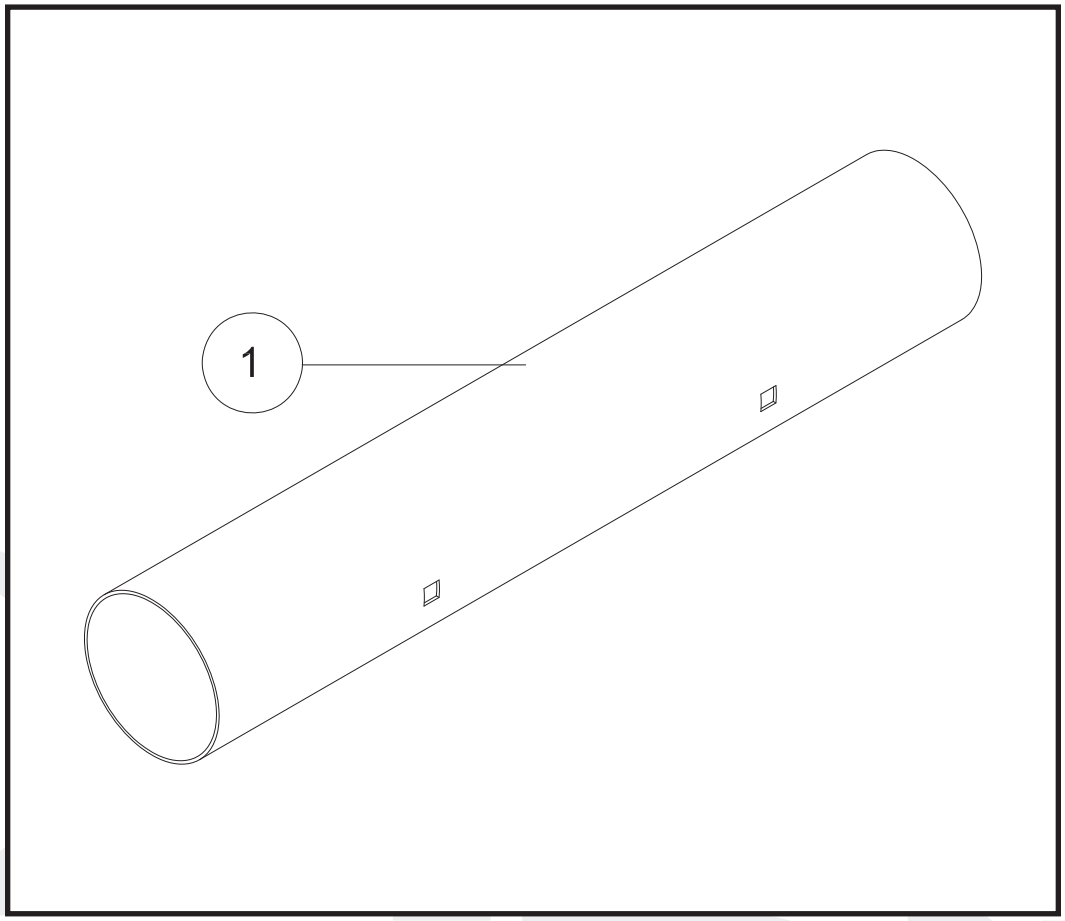


Description	Quantity	Item Number
Front Stabilizer	1	1

22-50-153

Rear Stabilizer

500Ub

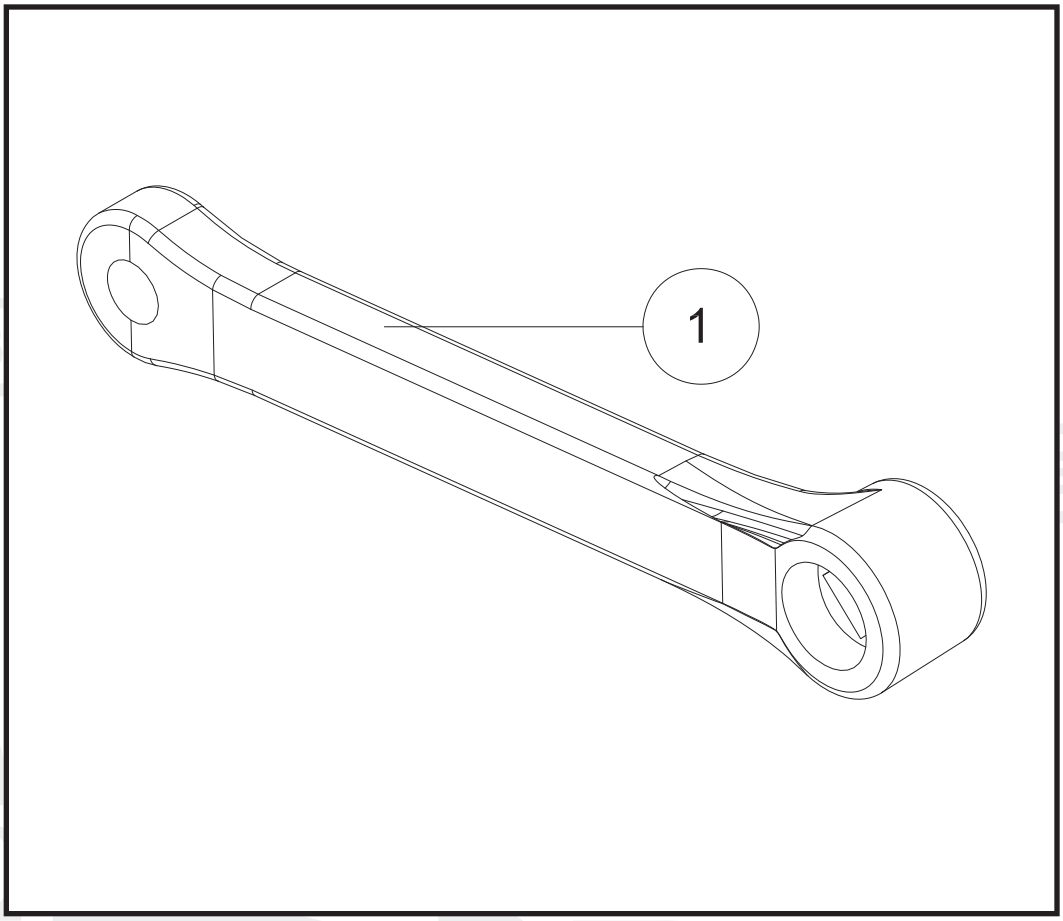


Description	Quantity	Item Number
Rear Stabilier	1	1

22-50-157

Left Crank Arm

500Ub/Sr

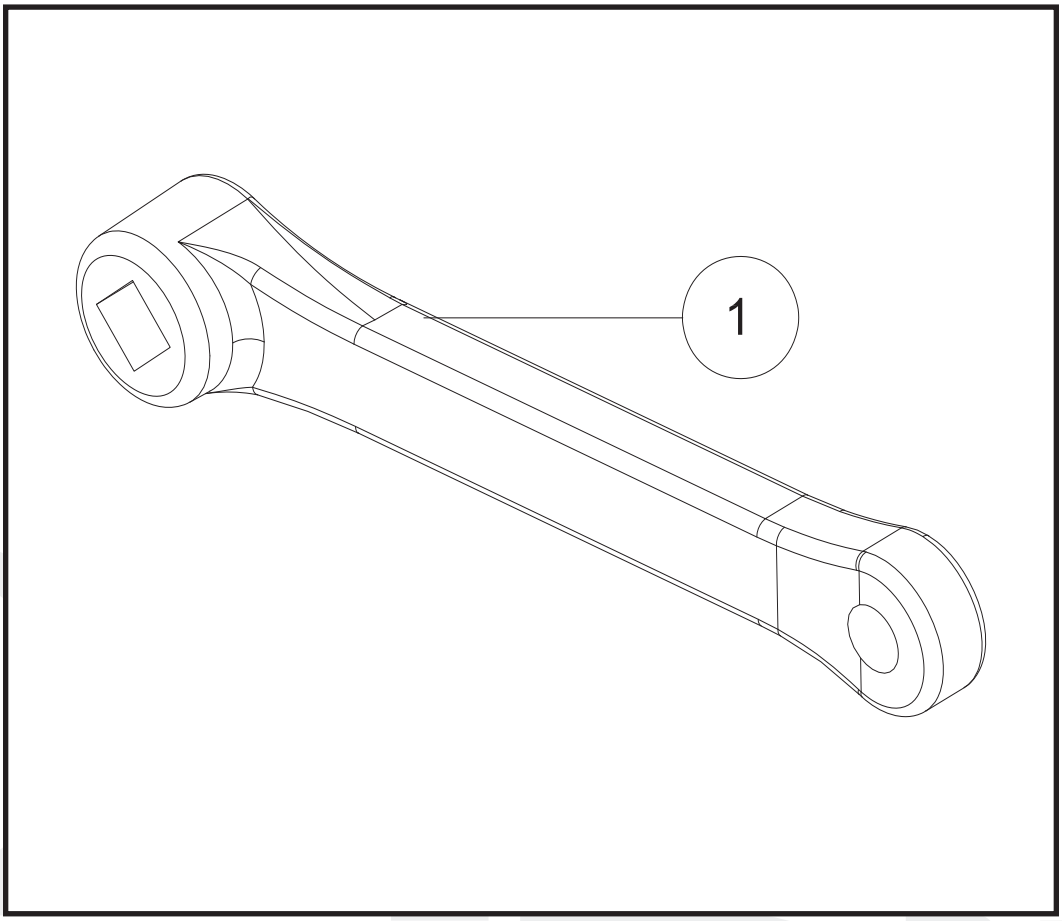


Description	Quantity	Item Number
Left Crank Arm 9/16"	1	1

22-50-159

Right Crank Arm

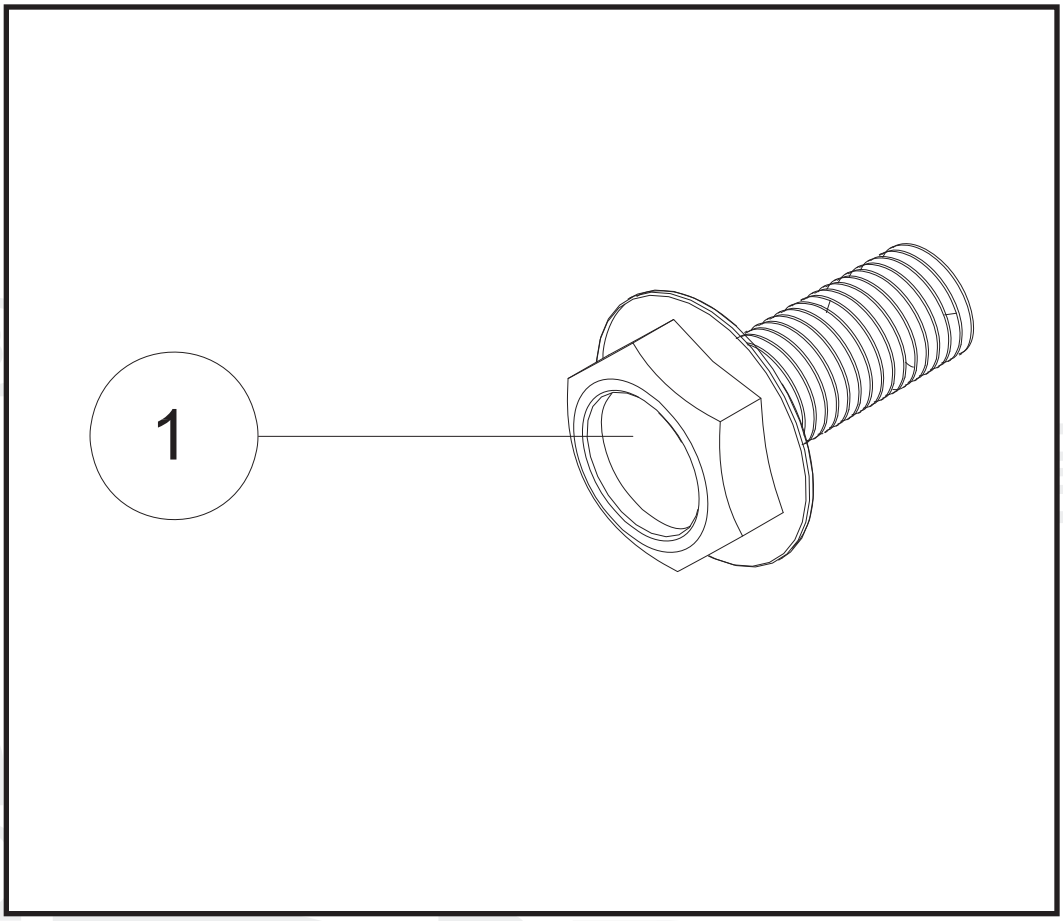
500Ub/Sr



Description	Quantity	Item Number
Right Crank Arm 9/16"	1	1

22-50-161

Crank Arm Hex Bolt
500Ub & 900Ub

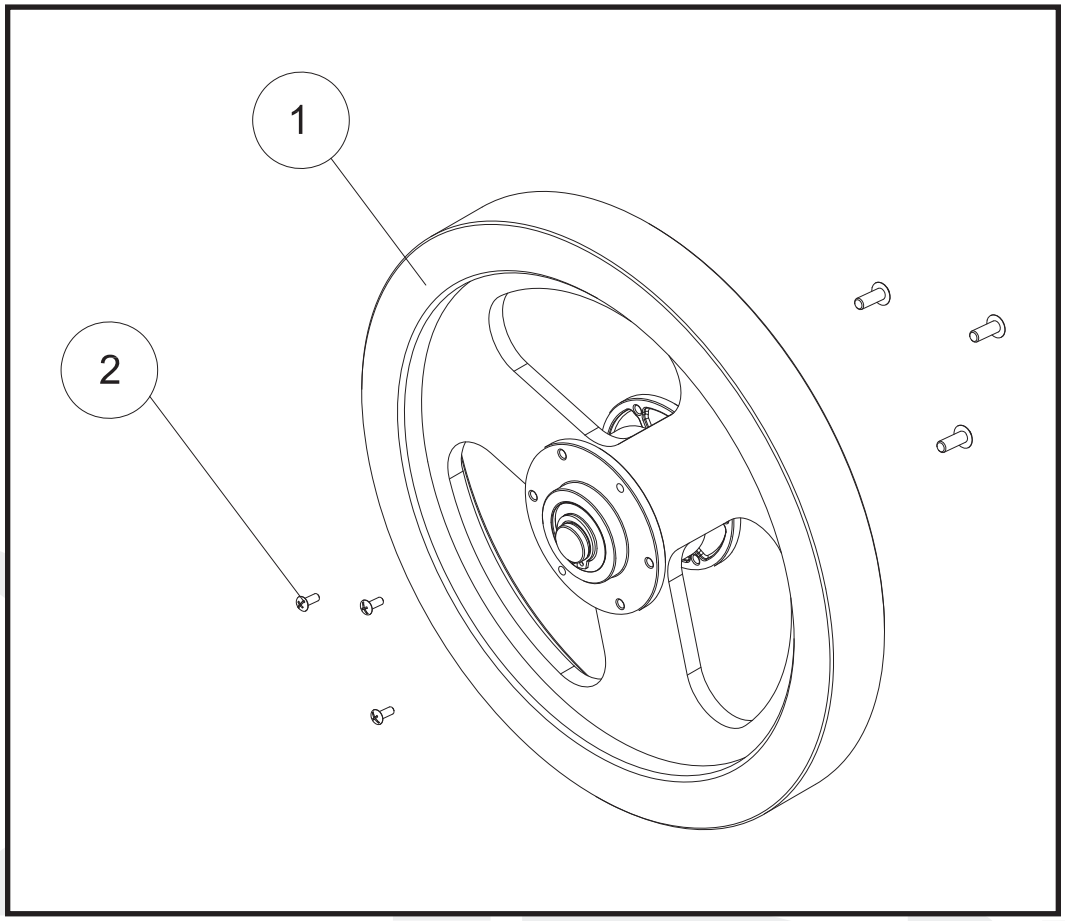


Description	Quantity	Item Number
Hex Bolt M8xP1.0x20L	2	1

22-50-163

Flywheel Assembly

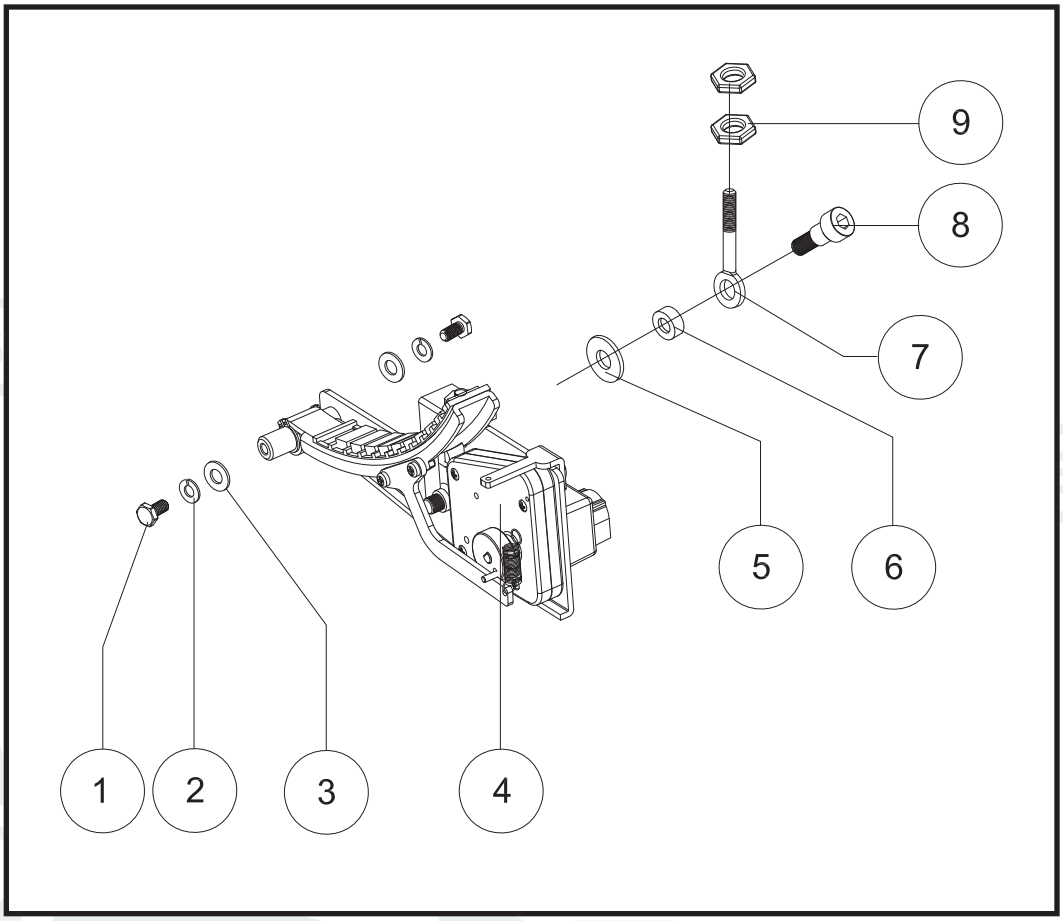
500Ub



Description	Quantity	Item Number
Flywheel Assembly with mounting brackets	1	1
Screw M5 x 10mm	6	2

22-50-165

Brake Assembly
500Ub & 900Ub

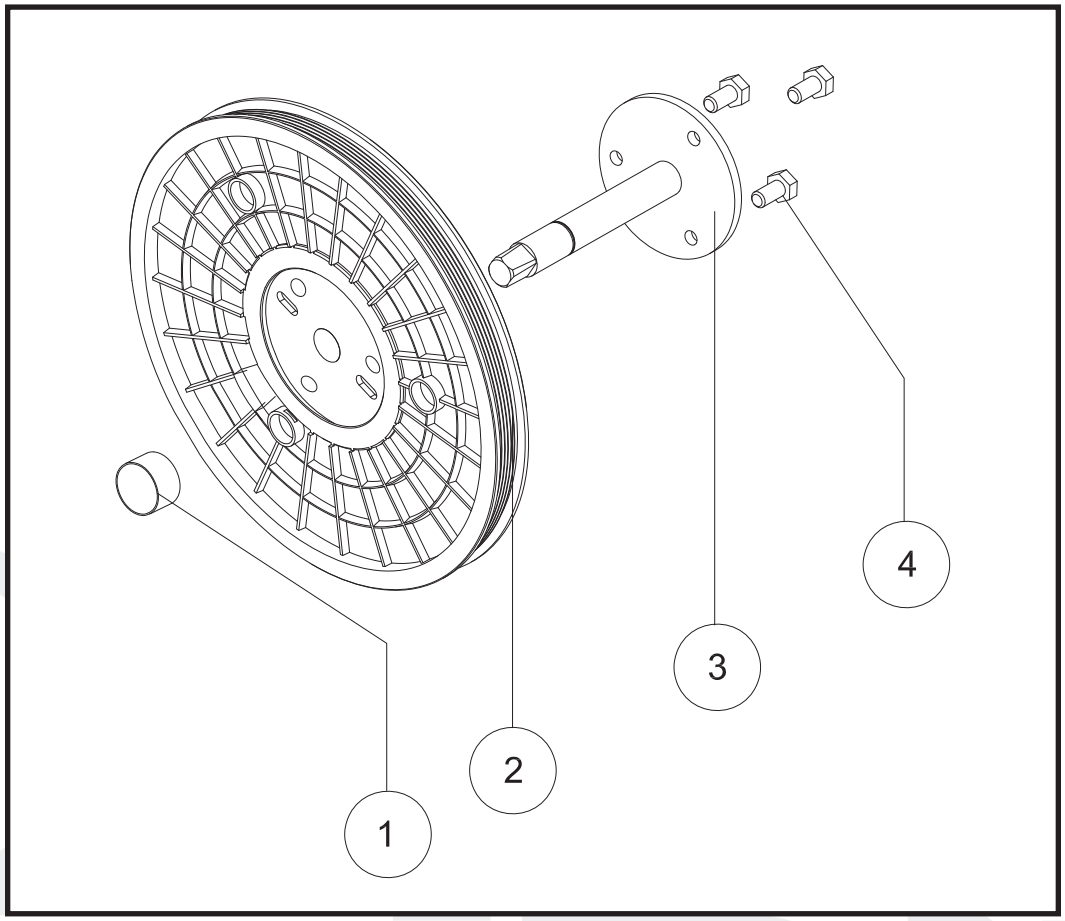


Description	Quantity	Item Number
Bolt M6 x 16mm	2	1
Lock Washer	2	2
Flat Washer 6 x 13 x 1	2	3
Brake Assembly	1	4
Flat Washer 8 x 19 x 2	1	5
Spacer	1	6
Adjustment Bolt M6 x 63mm	1	7
Bolt M8 x 22mm	1	8
Hex Nuts M6	2	9

22-50-167

Drive Pulley (Assemble)

500Ub

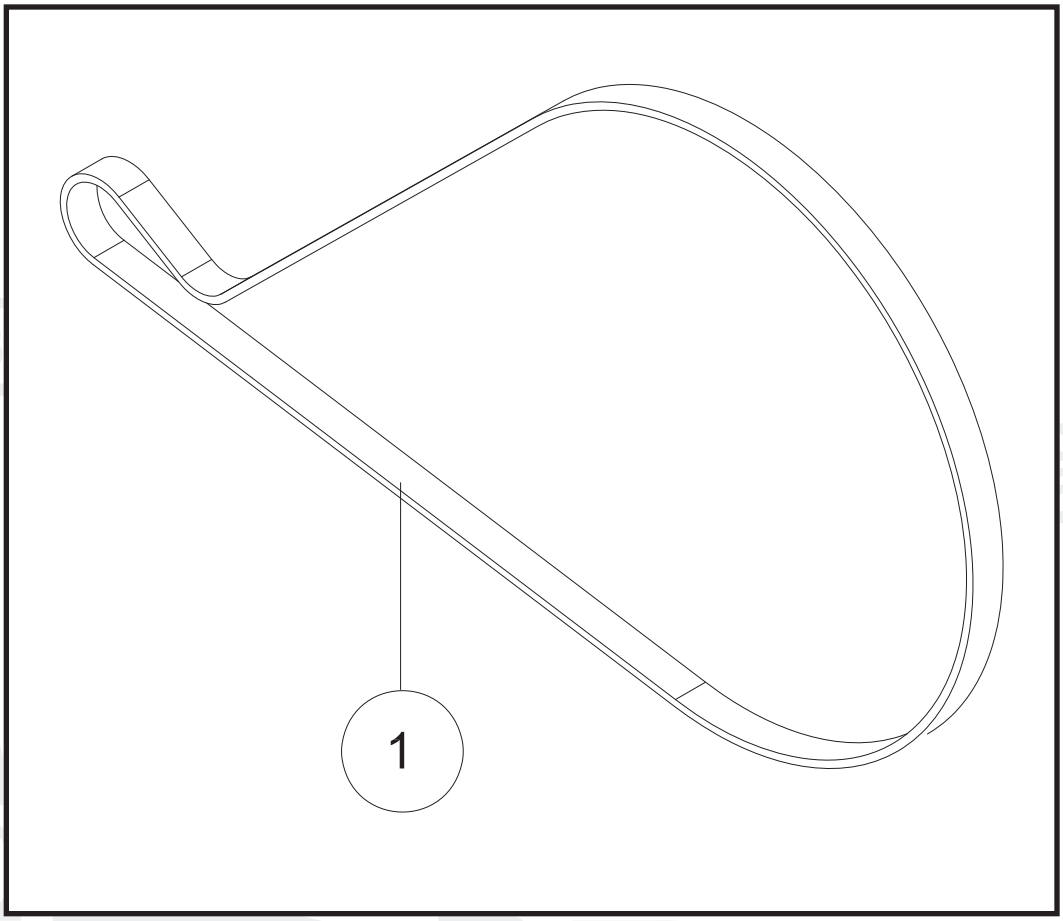


Description	Quantity	Item Number
Permanent Magnet	1	1
Drive Pulley	1	2
Axle	1	3
Bolt M8 x 12mm	3	4

22-50-169

Drive Belt

500Ub & 900Ub

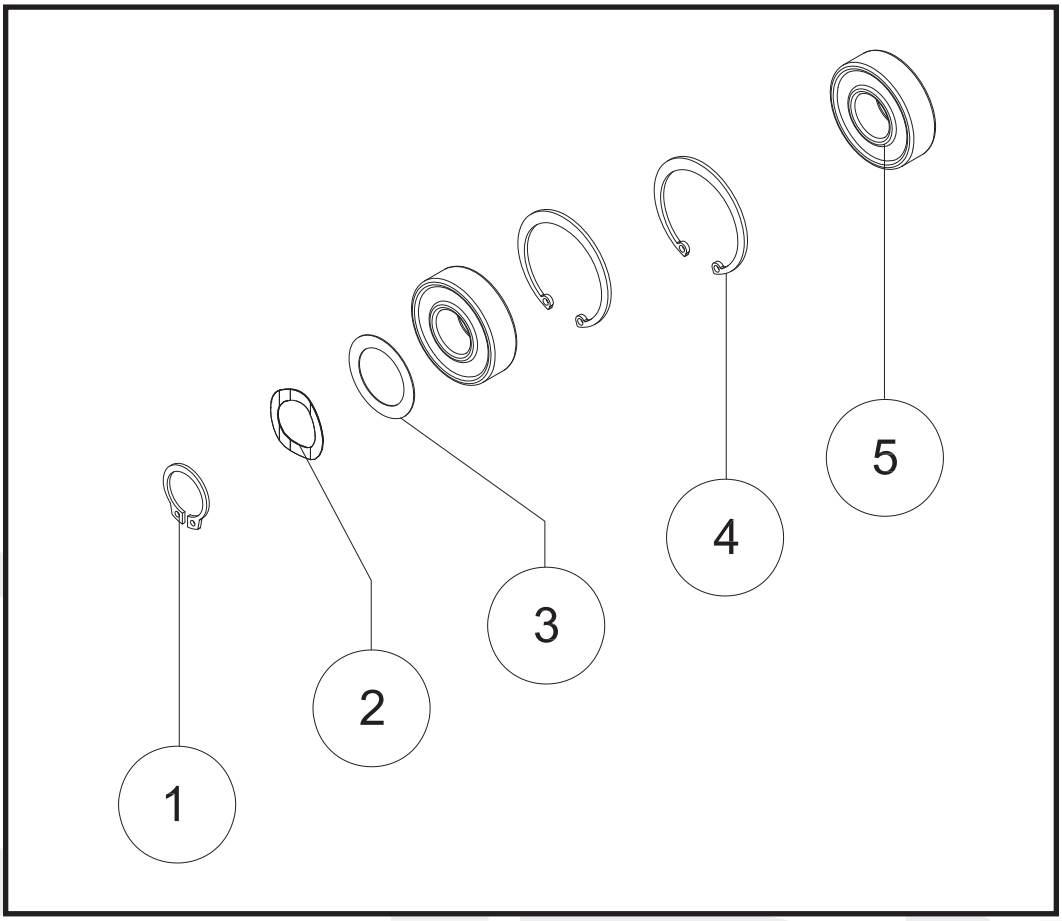


Description	Quantity	Item Number
Drive Belt J6 1059	1	1

22-50-171

BB Bearing Kit

500Ub

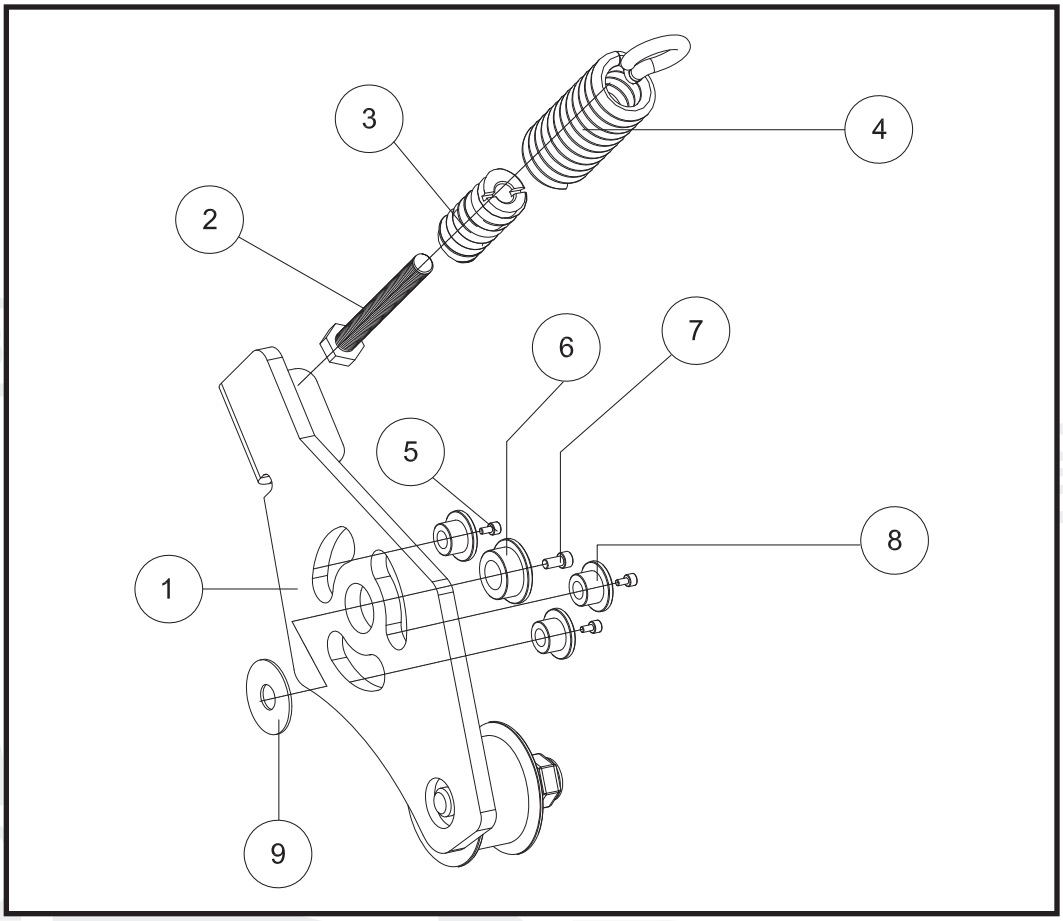


Description	Quantity	Item Number
C Clip 17 x 65	1	1
Wavy Washer	1	2
Flat Washer	1	3
C Clip 40 x 65	2	4
Bearings 6203 (RS)	2	5

22-50-173

Idler Assembly

500Ub/Sr & 900Ub/Sr

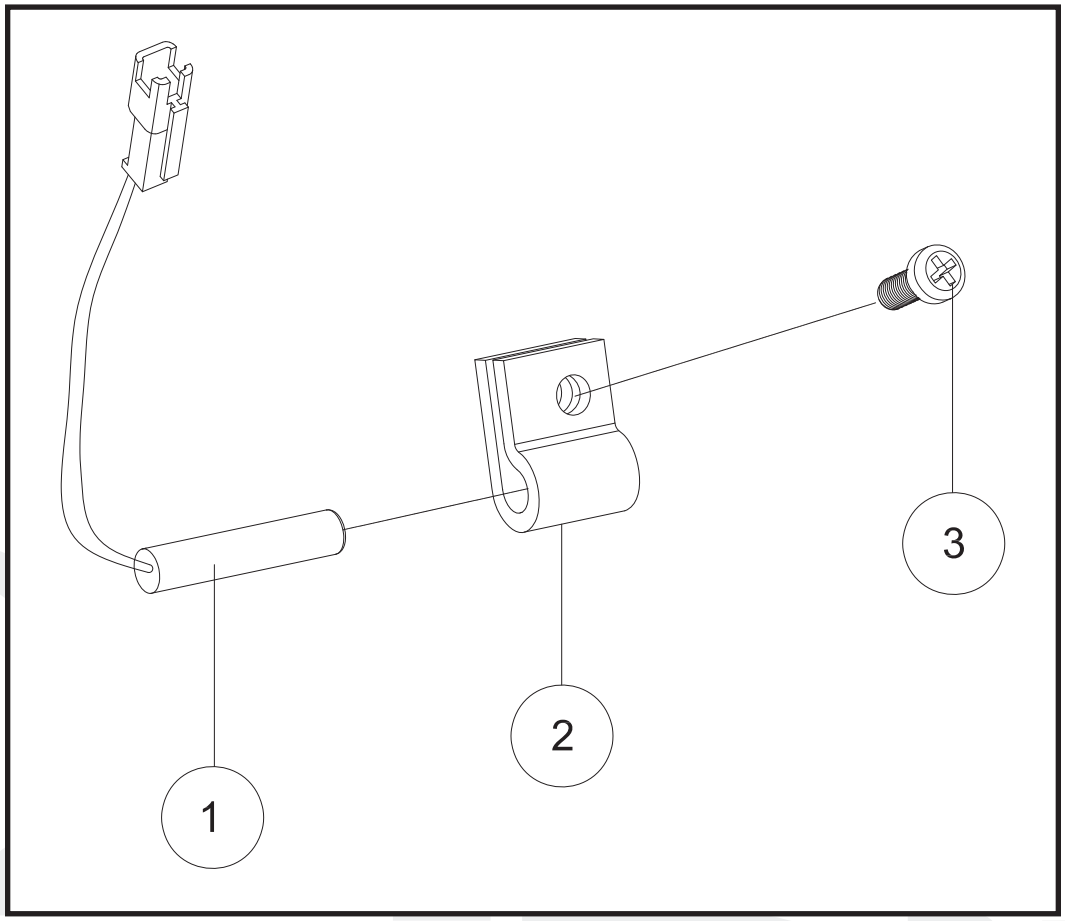


Description	Quantity	Item Number
Idler Assembly	1	1
Bolt M6 x 40mm	1	2
Spring Bracket 14 x 30	1	3
Spring	1	4
Bolt M5 x 10	3	5
T Spacer 9 x 5 x 6.5	1	6
Bolt M8 x 16	1	7
T Spacer 13.7 x 8.2 x 5.5	3	8
Flat Washer	1	9

22-50-175

Speed Sensor

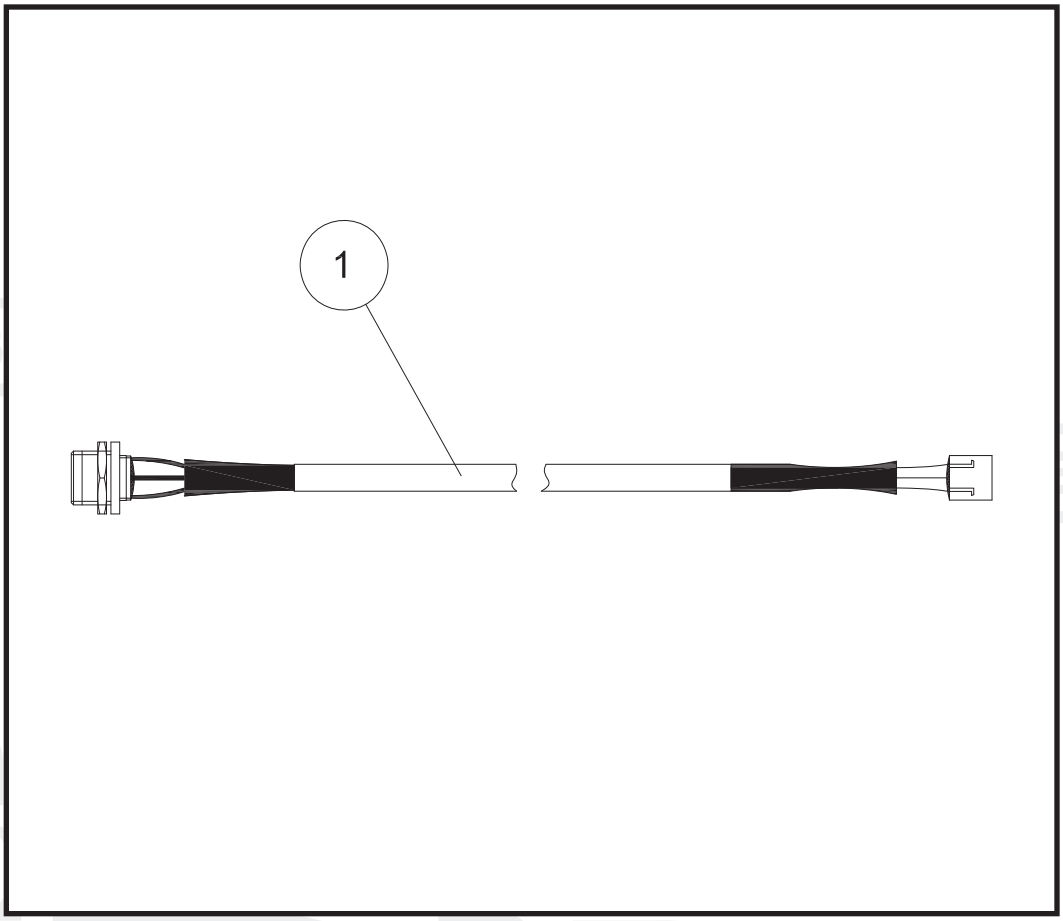
500Ub/Sr & 900Ub/Sr



Description	Quantity	Item Number
Speed Sensor with Wires	1	1
Bracket	1	2
Screw	1	3

22-90-177

Input Jack
500Ub & 900Ub

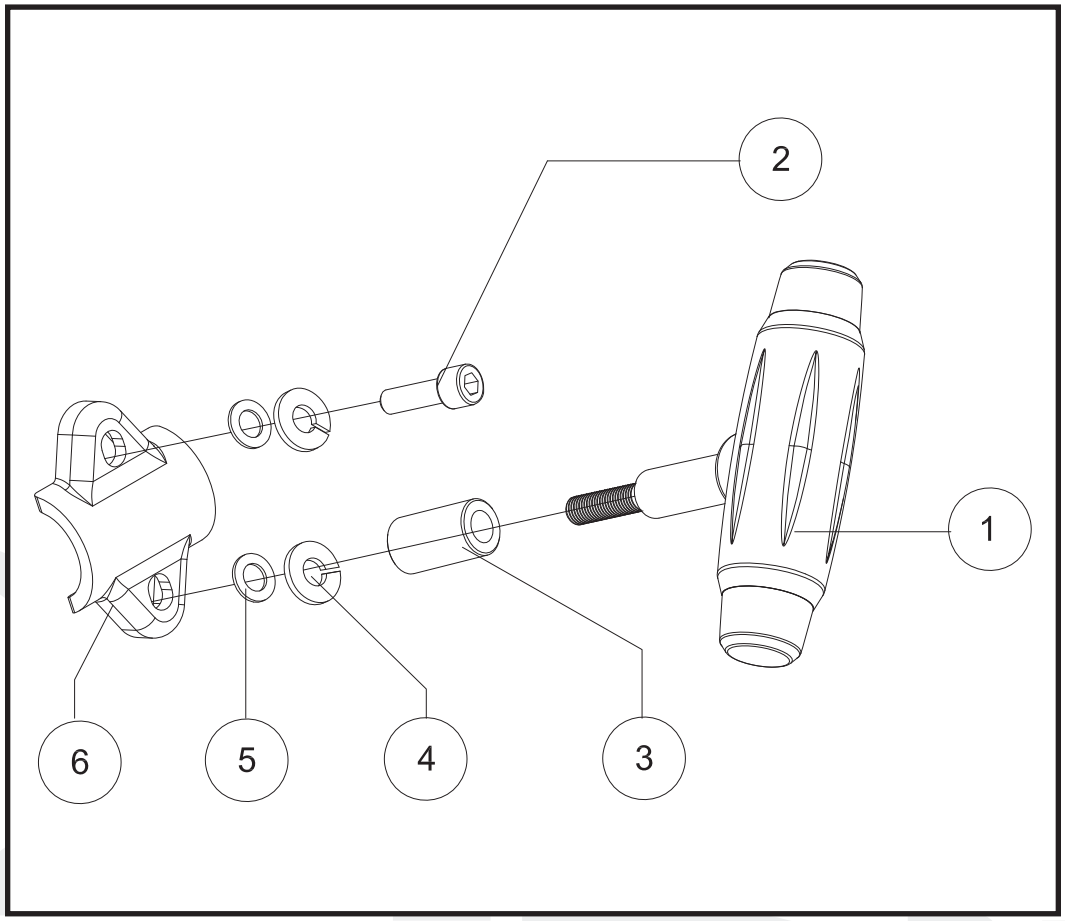


Description	Quantity	Item Number
Input jack	1	1

22-50-179

Hanble Bar Adjustment Knob

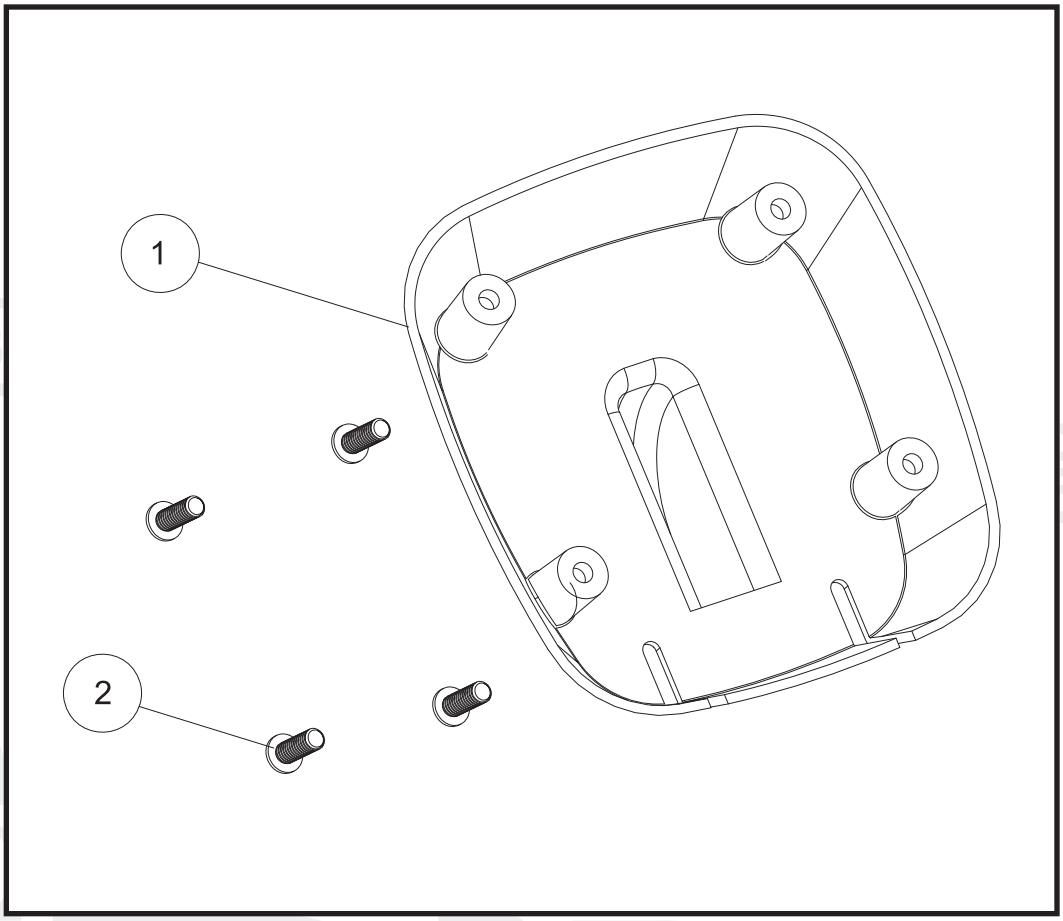
500Ub & 900Ub



Description	Quantity	Item Number
Knob	1	1
Bolt M7 x 30mm	1	2
Sleeve	1	3
Lock Washer	2	4
Flat Washer	2	5
Bracket	1	6

22-50-181

Console Back Panel
500Ub/Sr & 900Ub/Sr

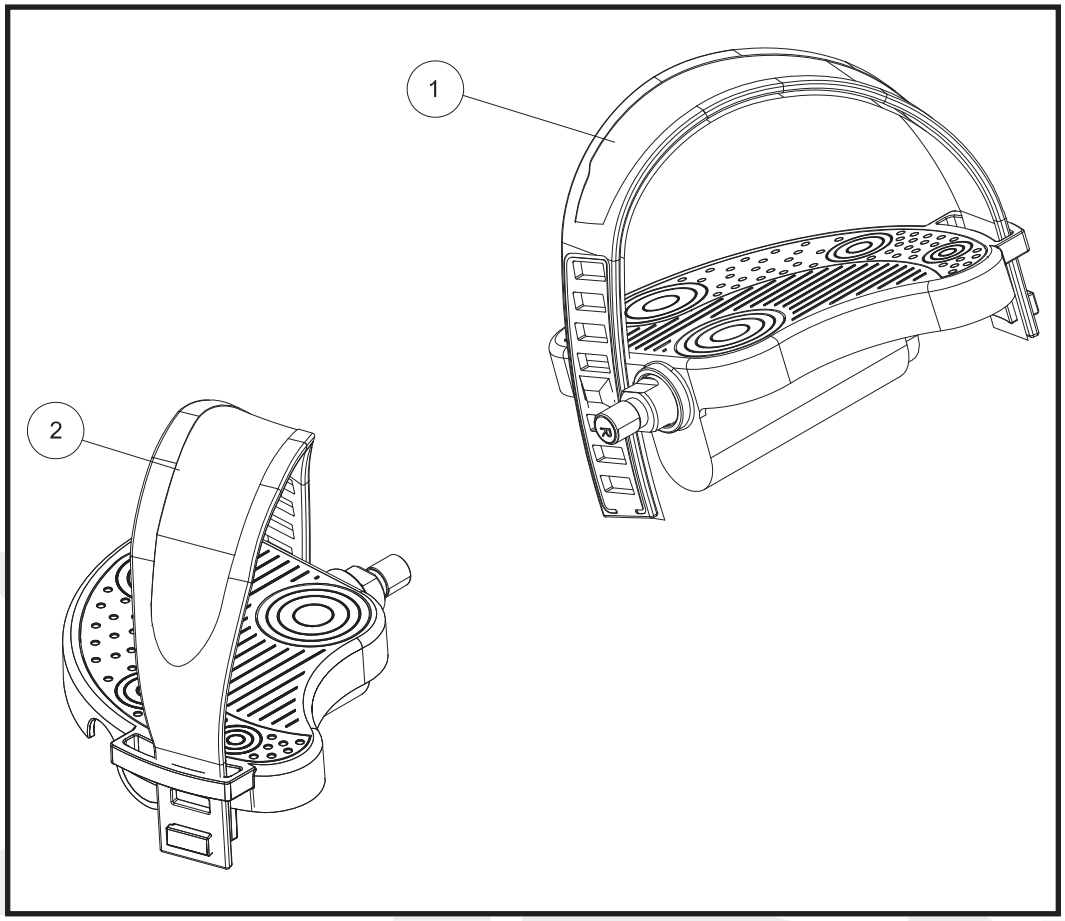


Description	Quantity	Item Number
Console Back Panel	1	1
Screw M5 x 10mm	4	2

22-50-281

Pedals & Straps (PR)

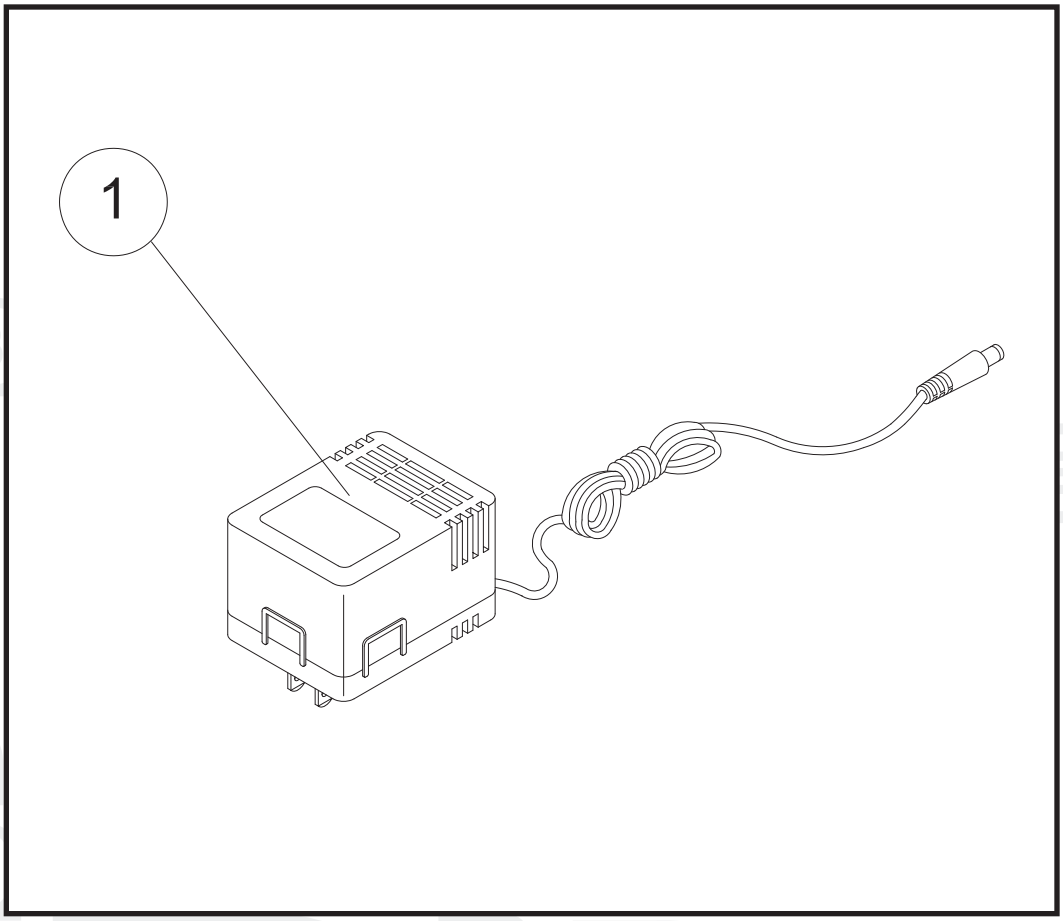
500Ub/Sr



Description	Quantity	Item Number
Right Pedal & Strap	1	1
Left Pedal & Strap	1	2

22-09-354

AC Adapter
500Ub/Sr & 900Ub/Sr



Description	Quantity	Item Number
AC Adapter 9V 1Amp	1	1

500Sr Parts List

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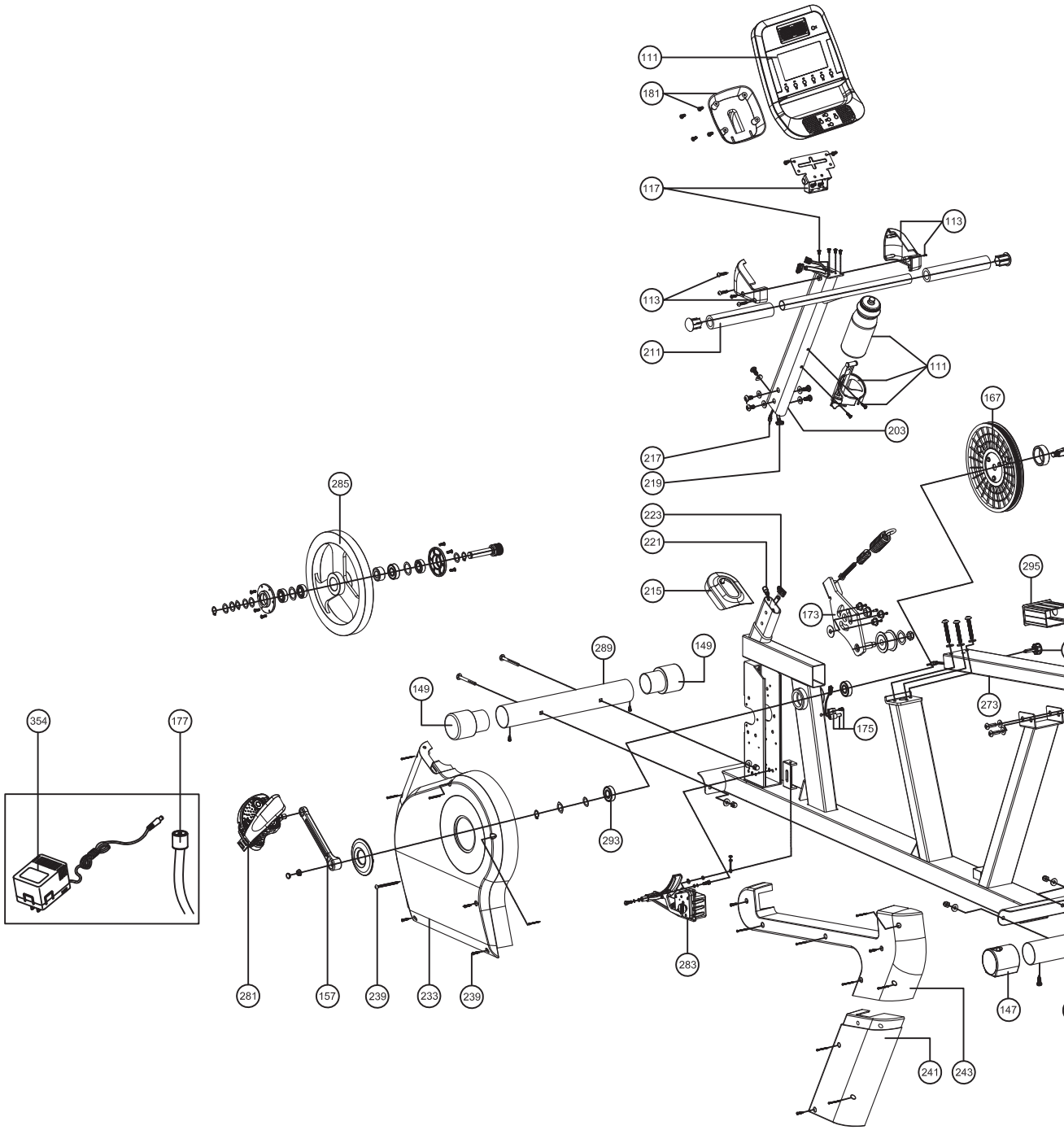
500Sr Explod



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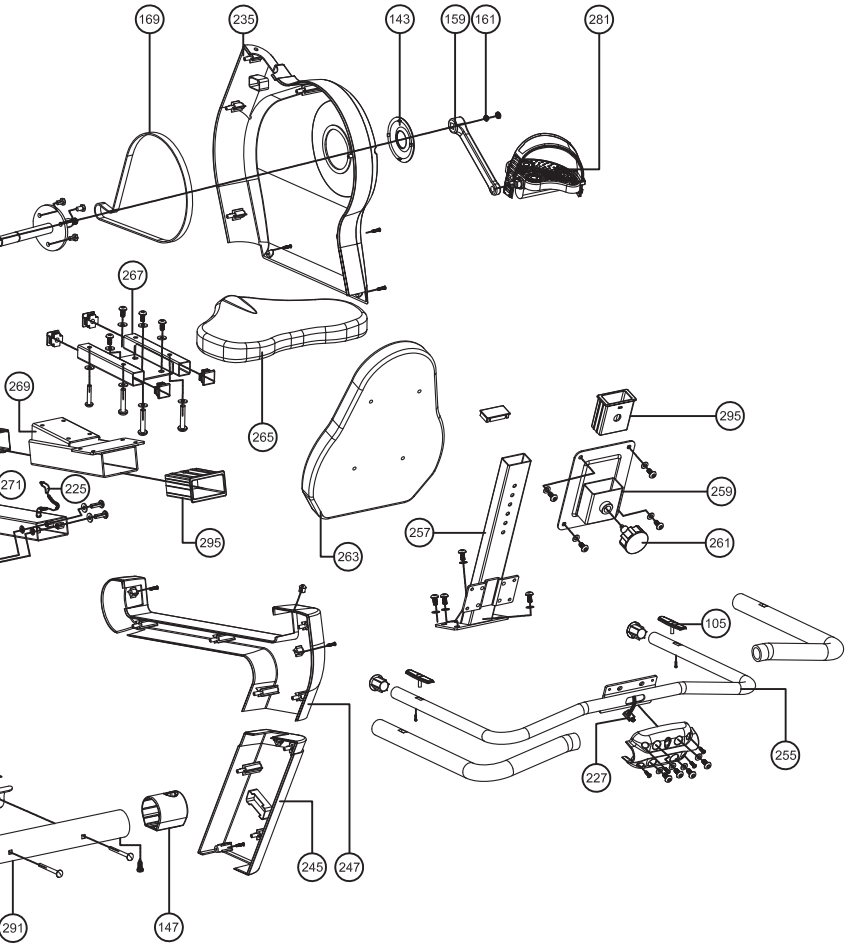
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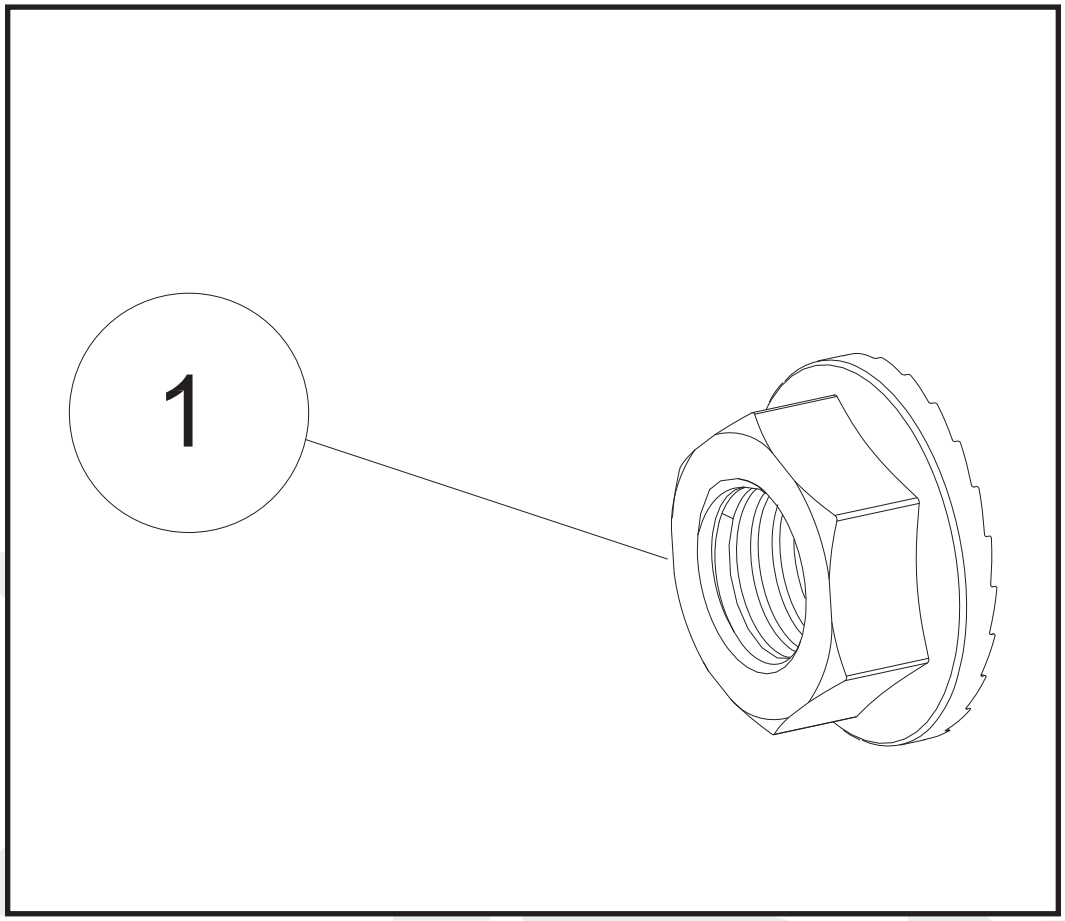
22-90-161

Crank Arm Hex Nut

500Sr & 900Sr

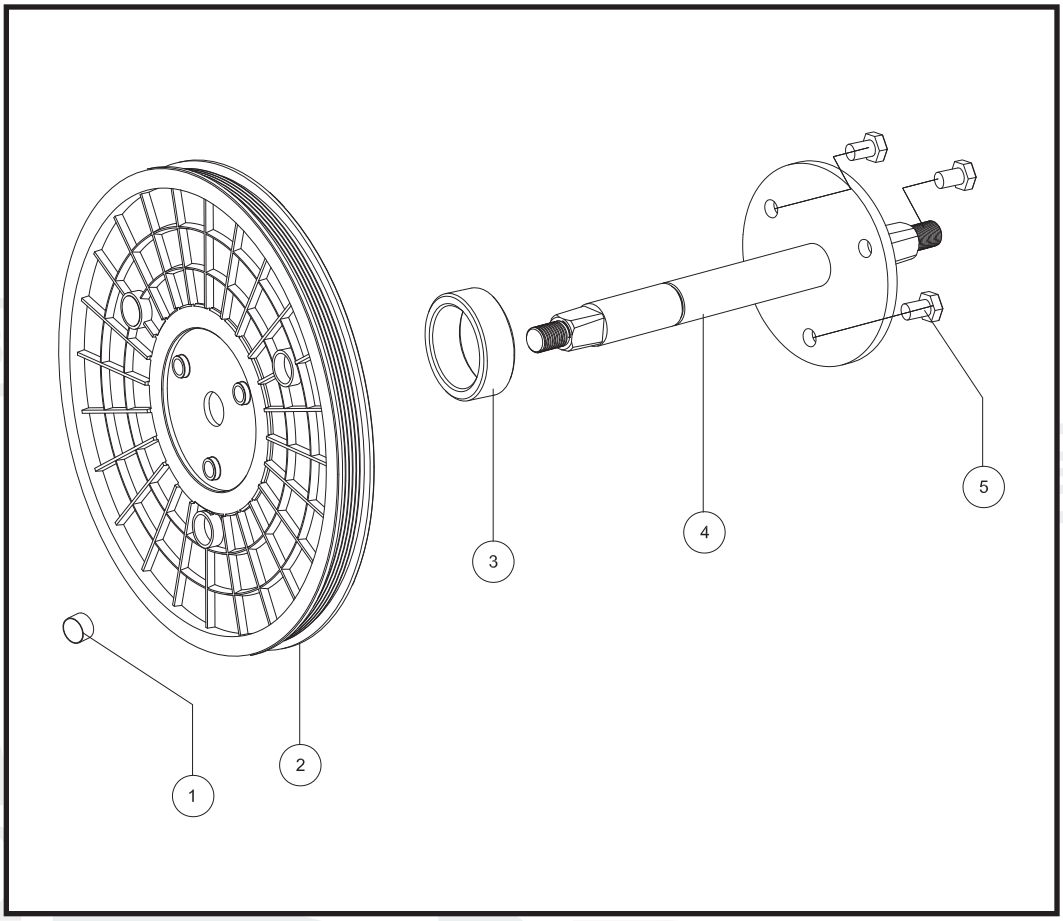


Description	Quantity	Item Number
Hex Nut M10xP1.25x10T	2	1

22-50-168

Drove Pulley (Assemble)

500Sr

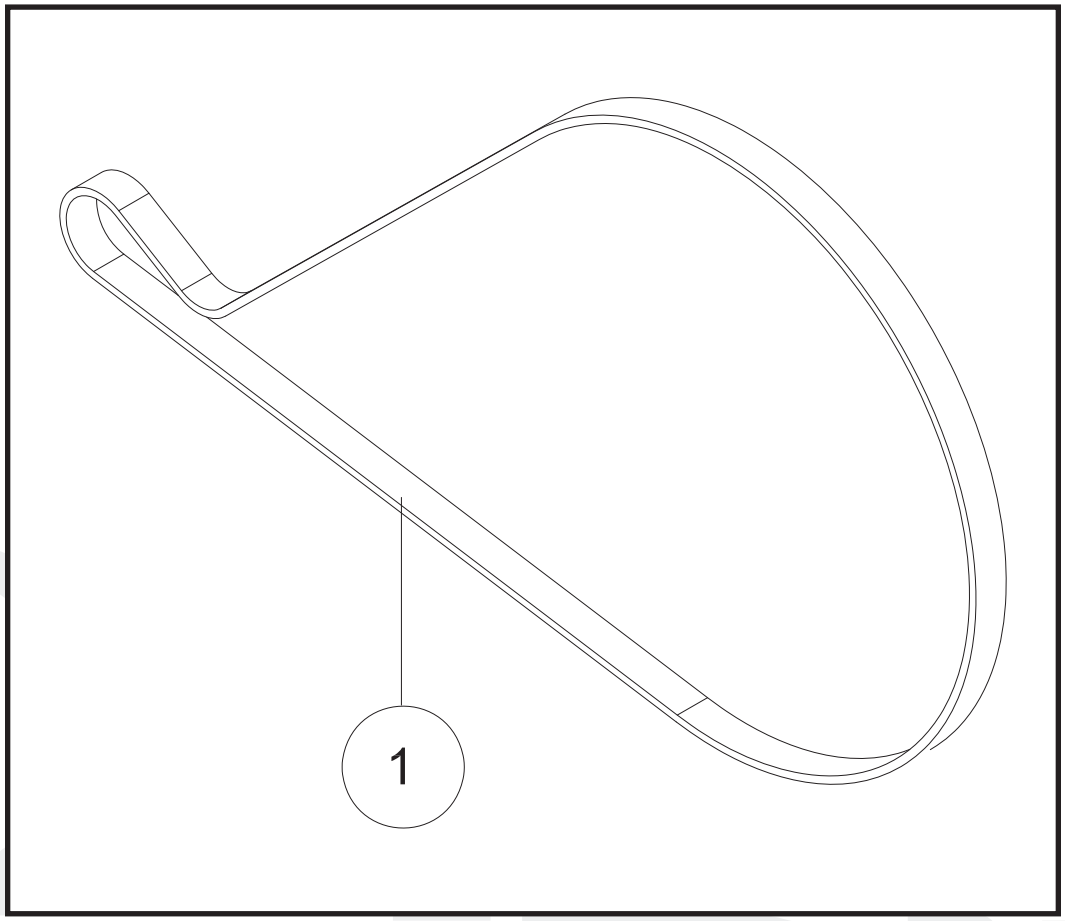


Description	Quantity	Item Number
Permanent Magnet	1	1
Drive Pulley	1	2
Spacer	1	3
Axle	1	3
Bolt M8 x 12mm	3	4

22-90-169

Drive Belt

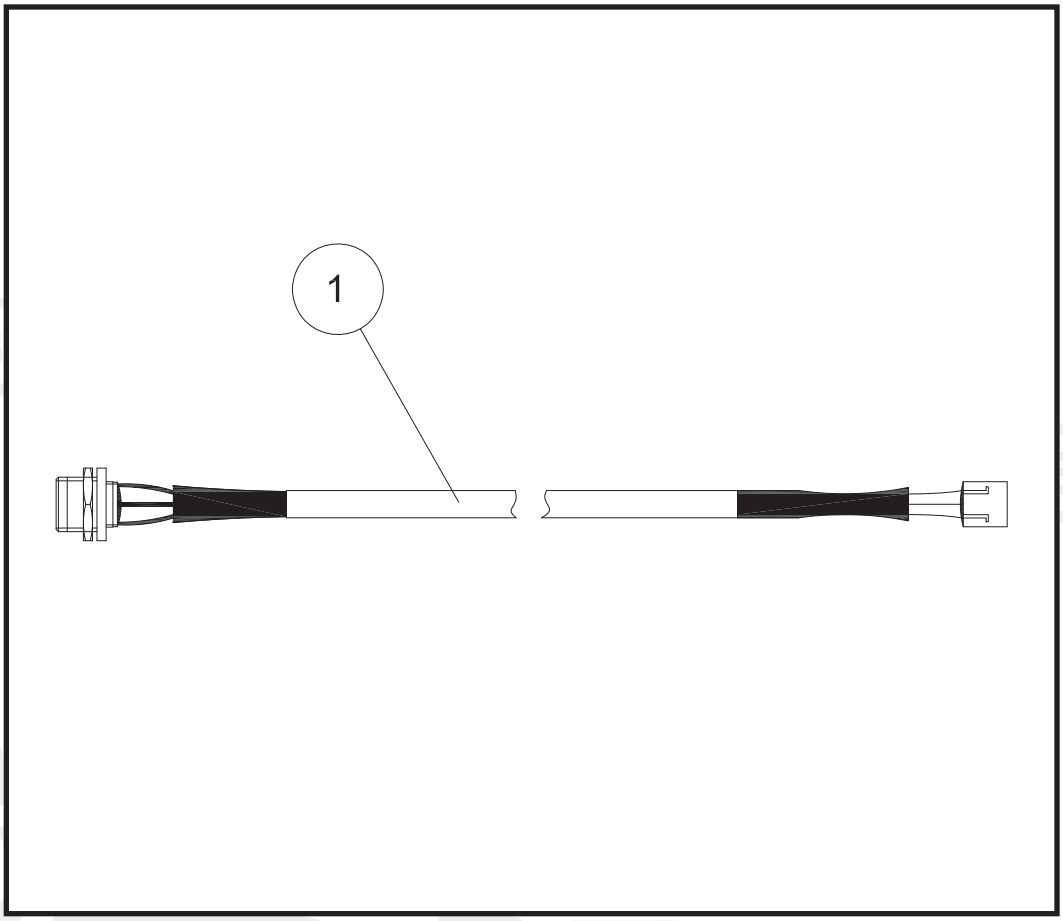
500Sr & 900Sr



Description	Quantity	Item Number
Drive Belt J6 960m/m	1	1

22-50-177

Input Jack
500Sr & 900Sr

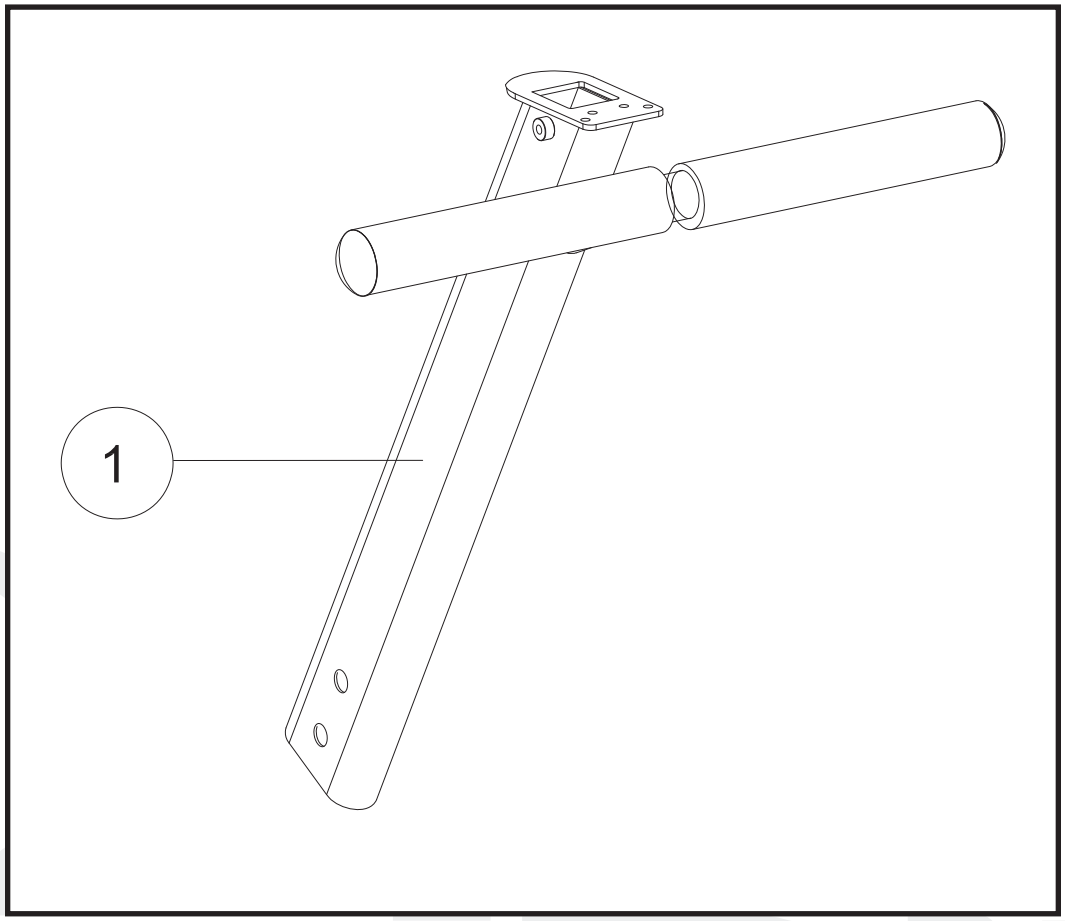


Description	Quantity	Item Number
Input Jack	1	1

22-50-203

Console Mast

500Sr

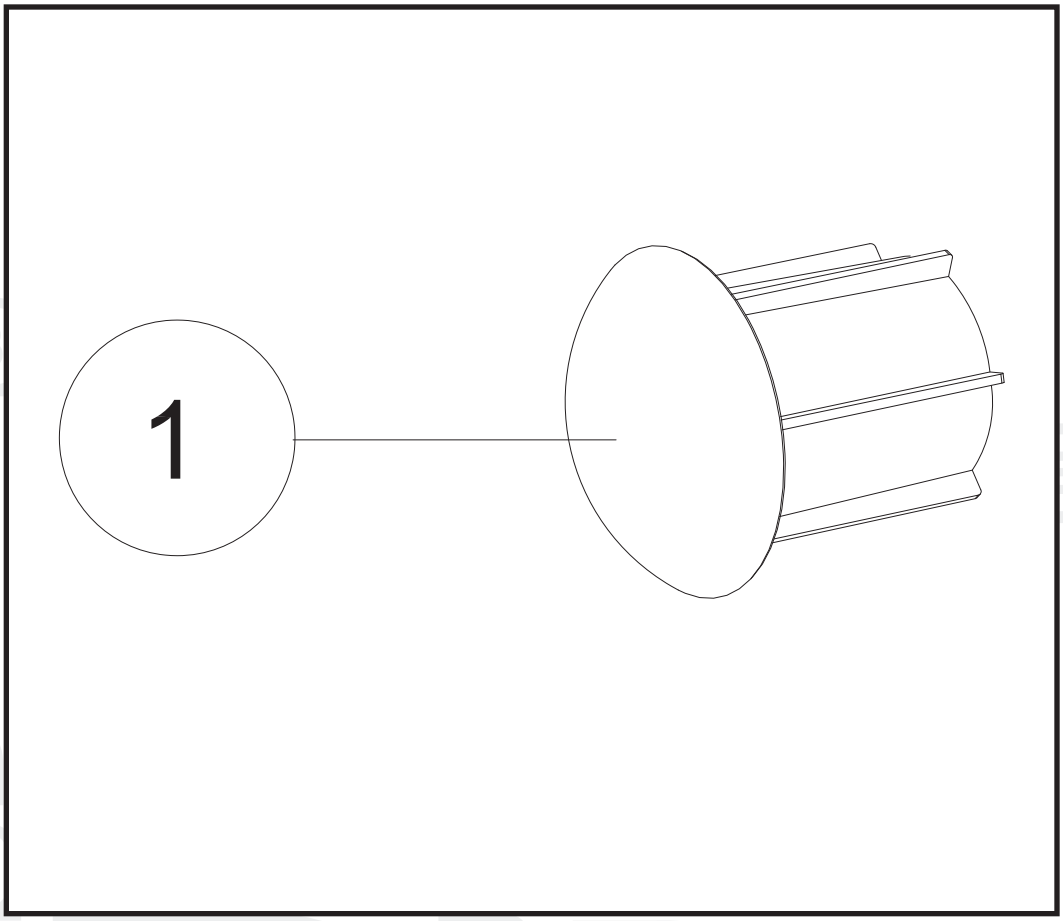


Description	Quantity	Item Number
Console Mast w/ Foam Grips & Endcaps	1	1

22-90-209

Handle Bar Endcap

500Sr & 900Sr

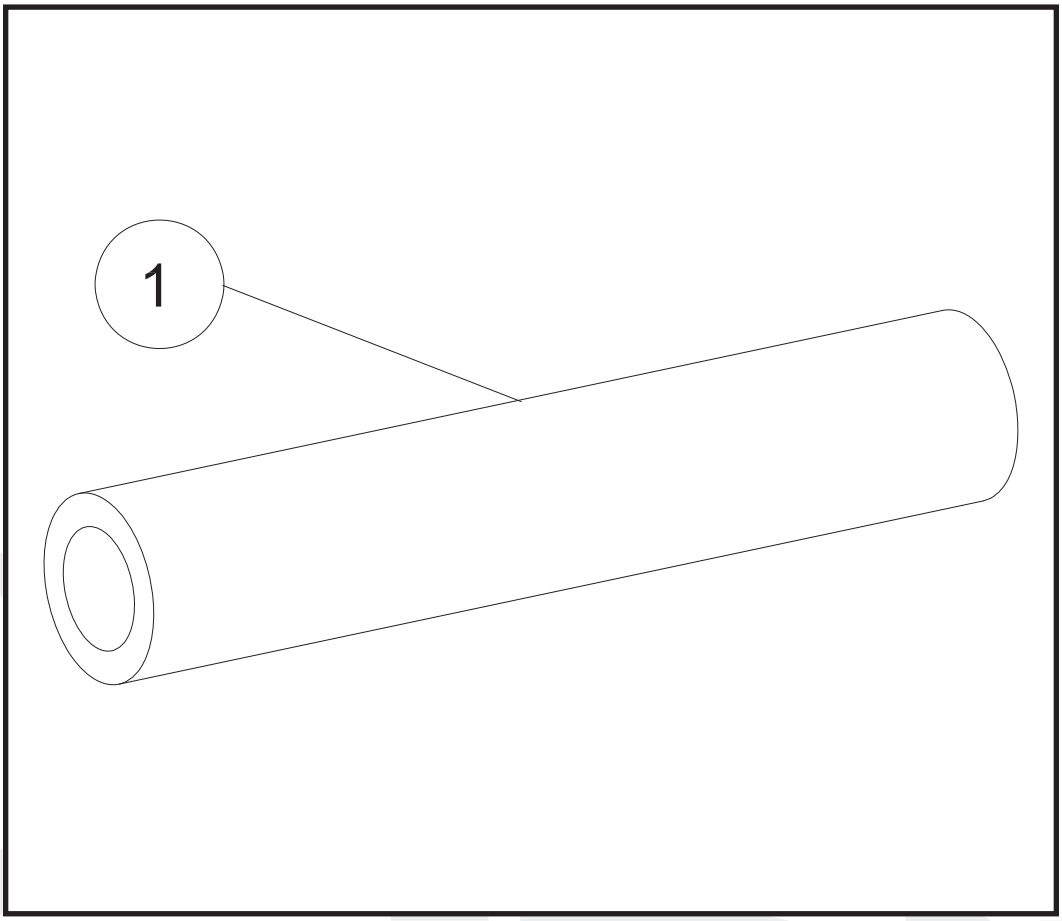


Description	Quantity	Item Number
Endcaps	4	4

22-50-211

Foam Grip

500Sr

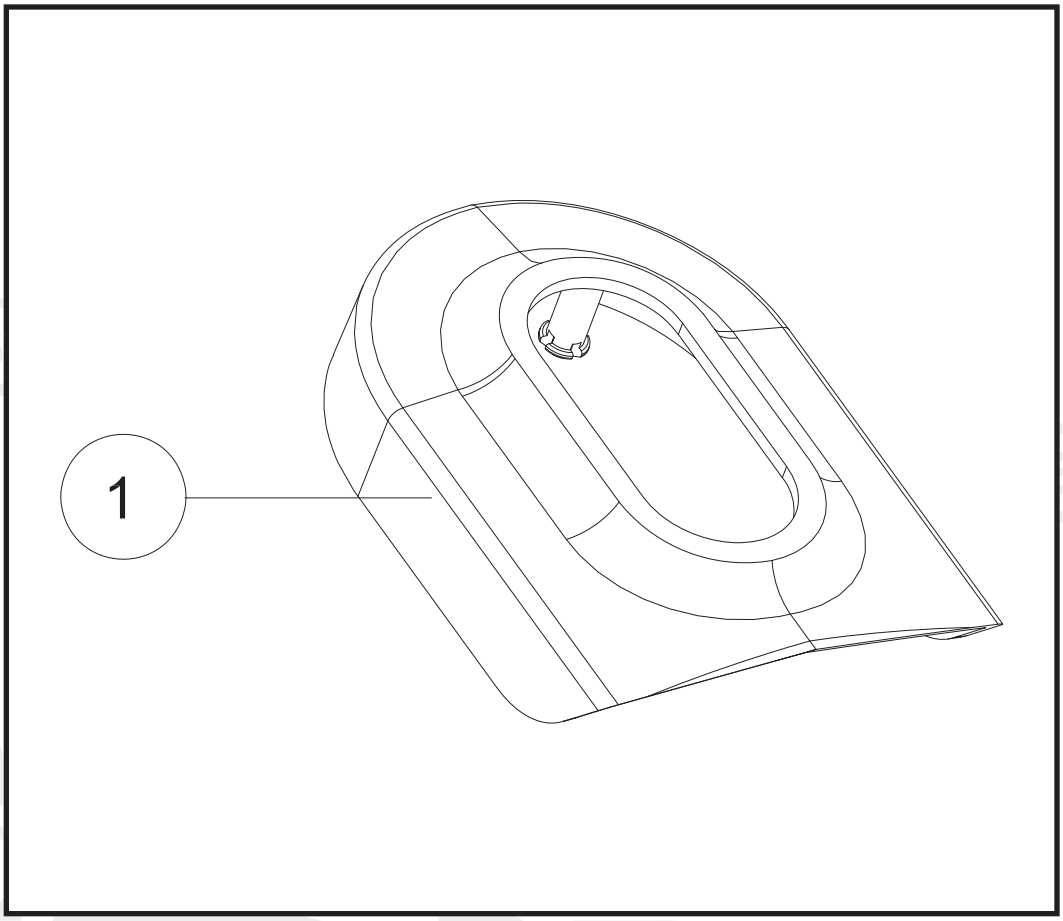


Description	Quantity	Item Number
Foam Grip	2	1

22-50-215

Console Mast Cover

500Sr

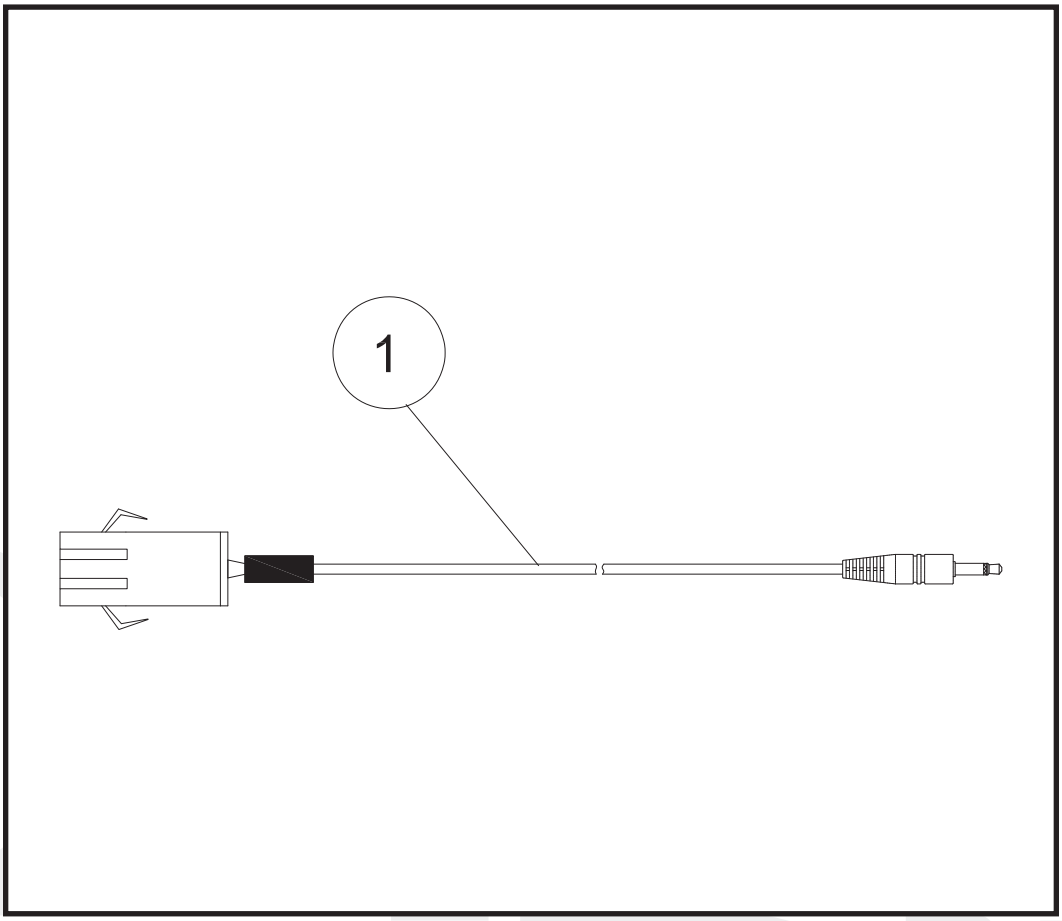


Description	Quantity	Item Number
Console Mast Cover	1	1

22-50-217

HP Wire Harness - Console Mast

500Sr & 900Sr

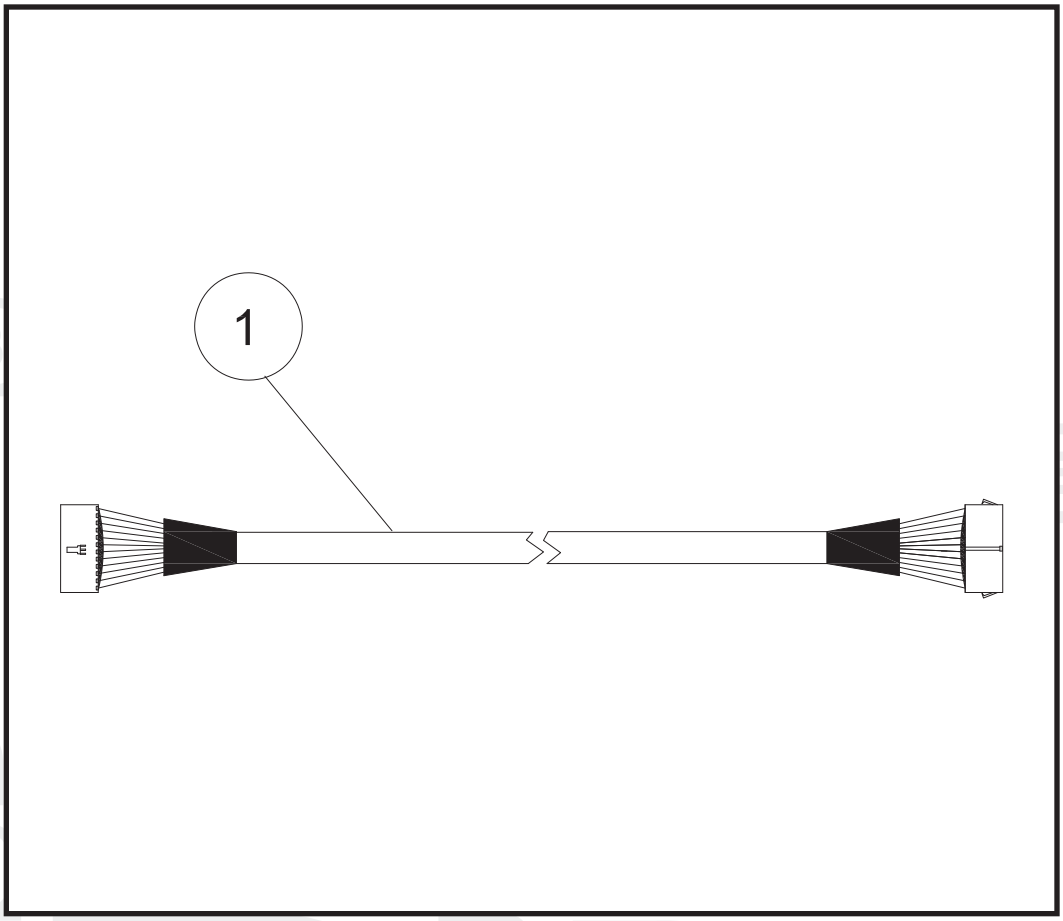


Description	Quantity	Item Number
HP Wire Harness - Console Mast	1	1

22-50-219

Main Wire Harness - Console Mast

500Sr & 900Sr

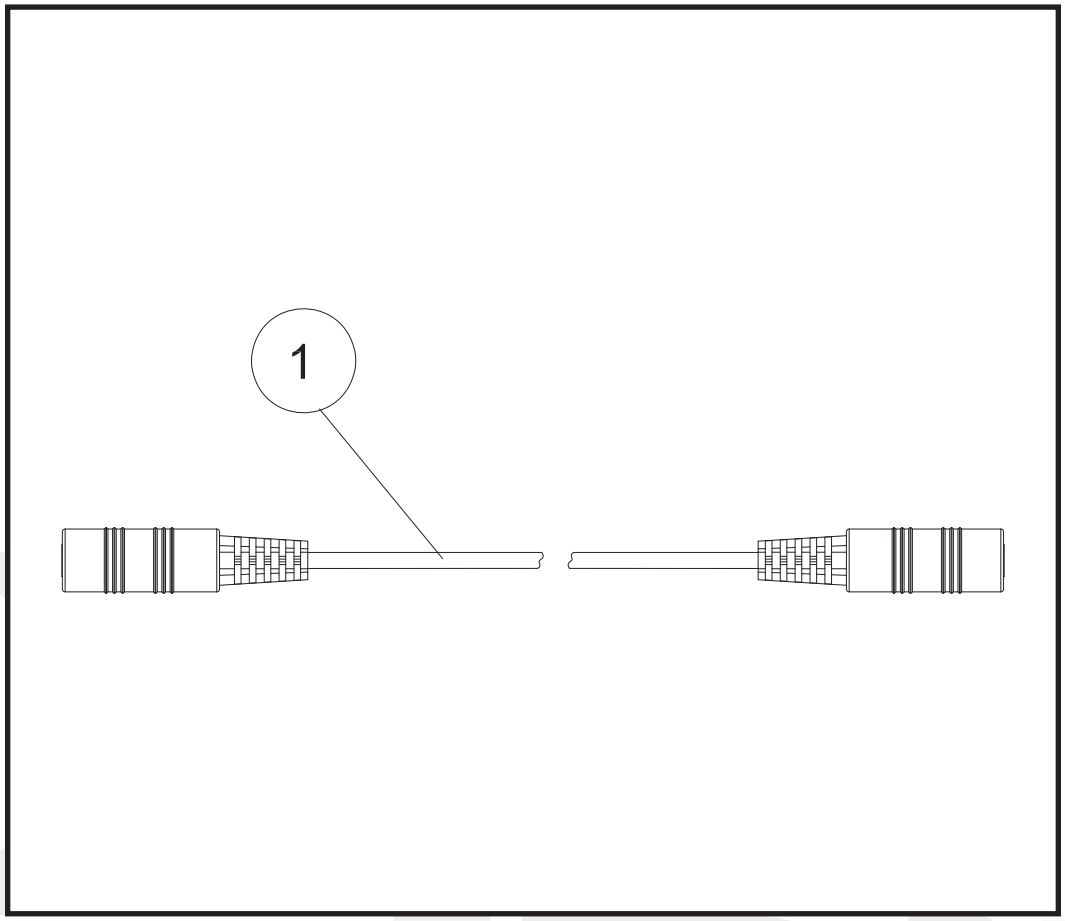


Description	Quantity	Item Number
Main Wire Harness - Console Mast	1	1

22-50-221

HP Wire Harness - Frame

500Sr & 900Sr

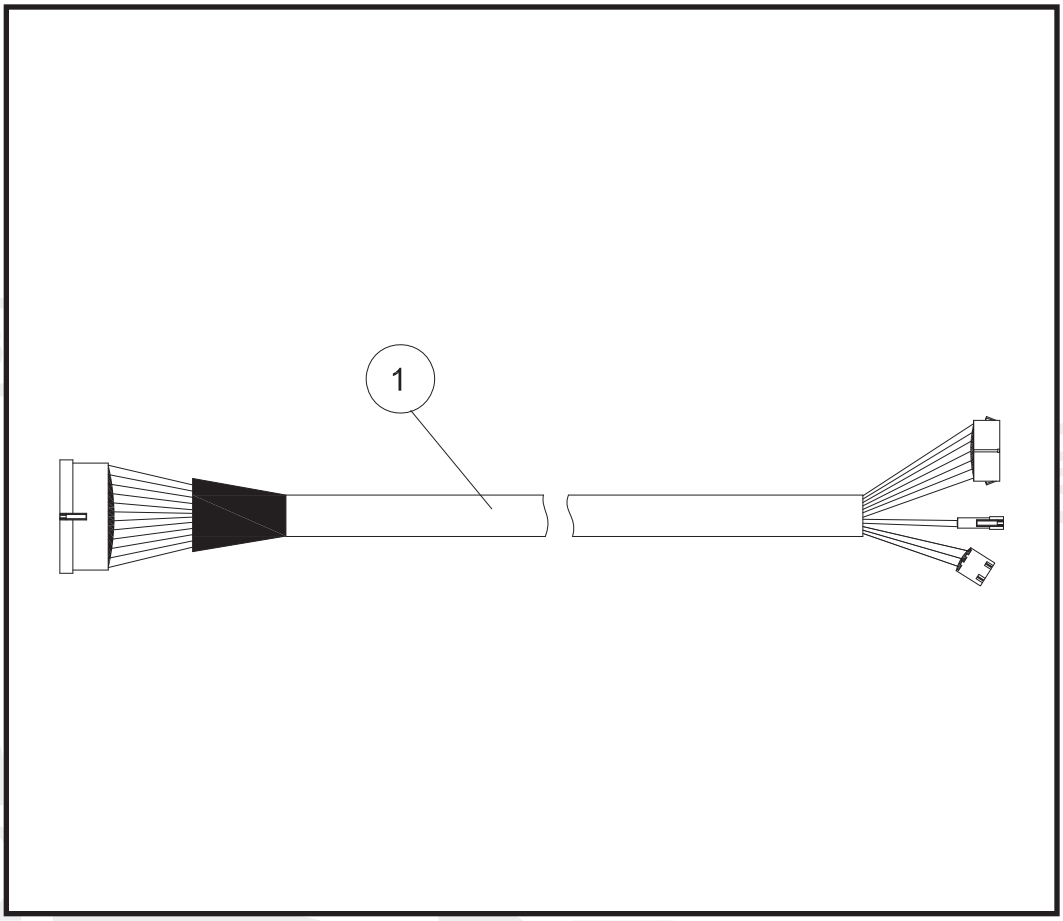


Description	Quantity	Item Number
HP Wire Harness - Frame	1	1

22-50-223

Main Wire Harness - Frame

500Sr & 900Sr

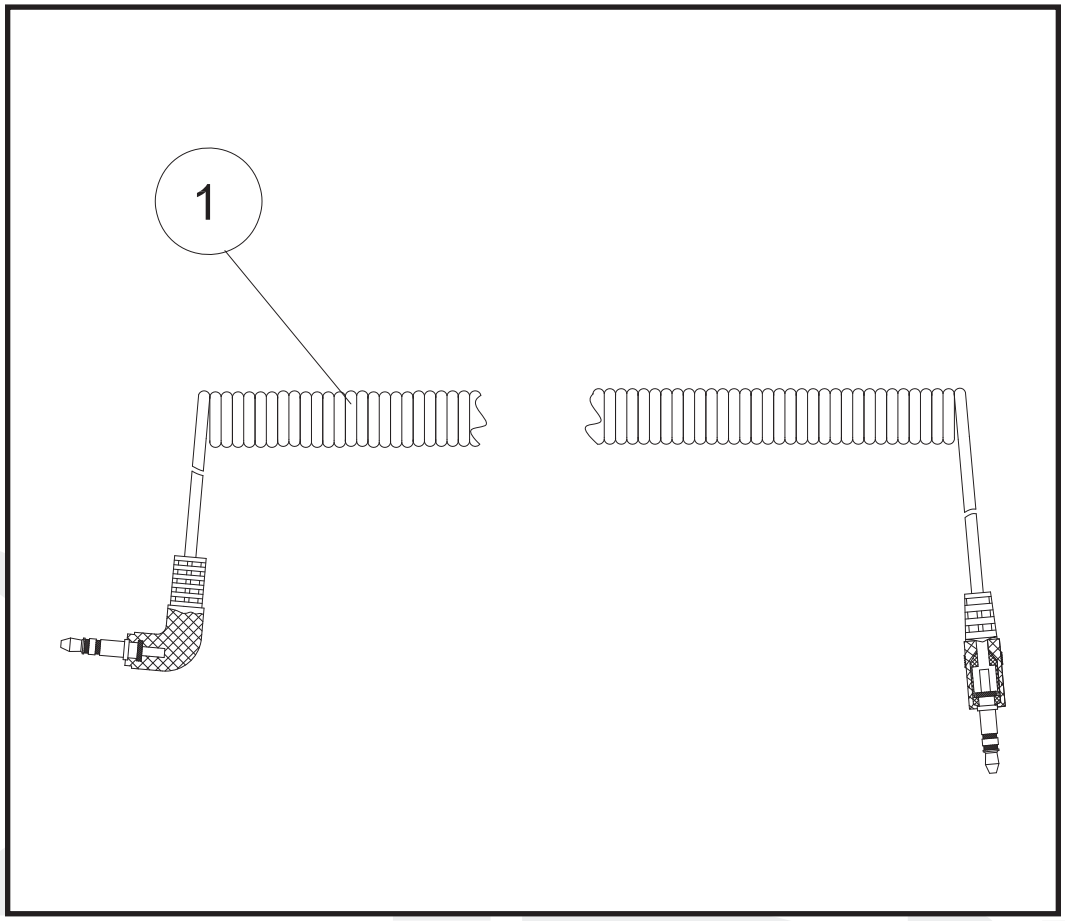


Description	Quantity	Item Number
Main Wire Harness - Frame	1	1

22-50-225

HP Wire Harness - Frame Rear

500Sr & 900Sr

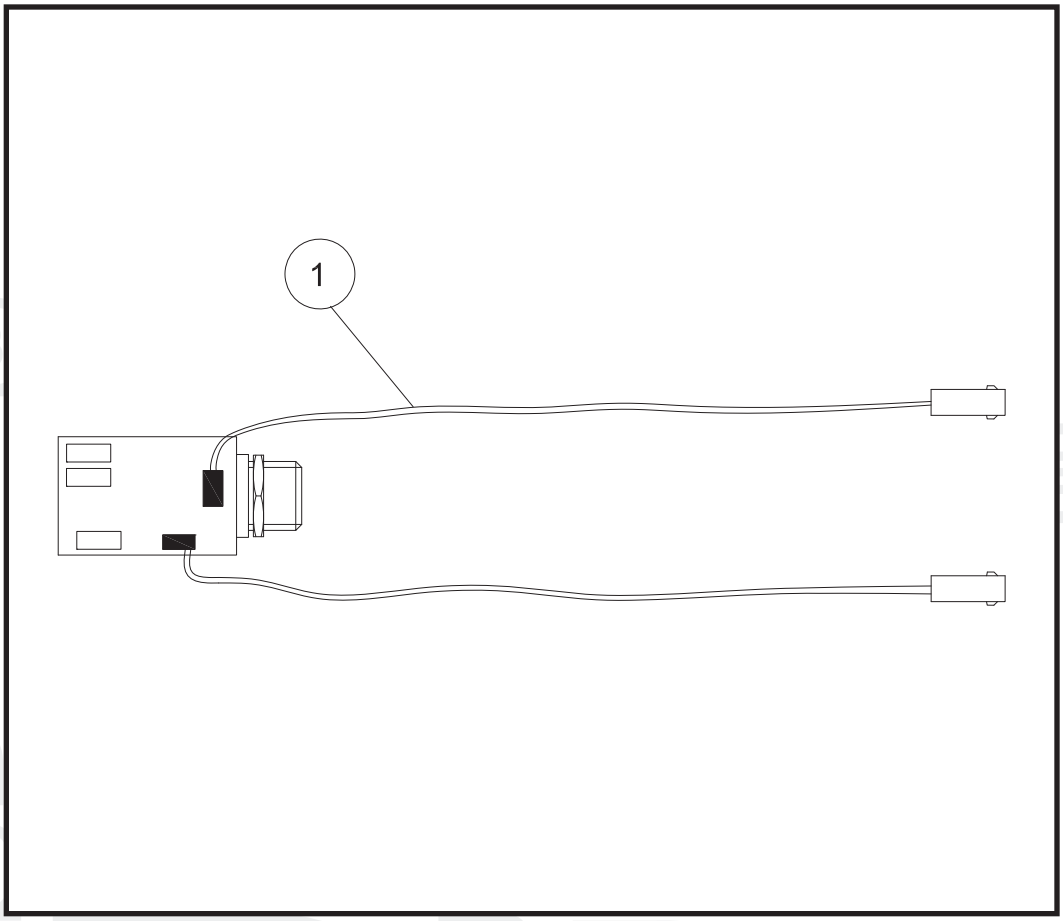


Description	Quantity	Item Number
Hp Wire Harness - Frame Rear	1	1

22-50-227

HP Wire Harness - Rear Handle Bar

500Sr & 900Sr

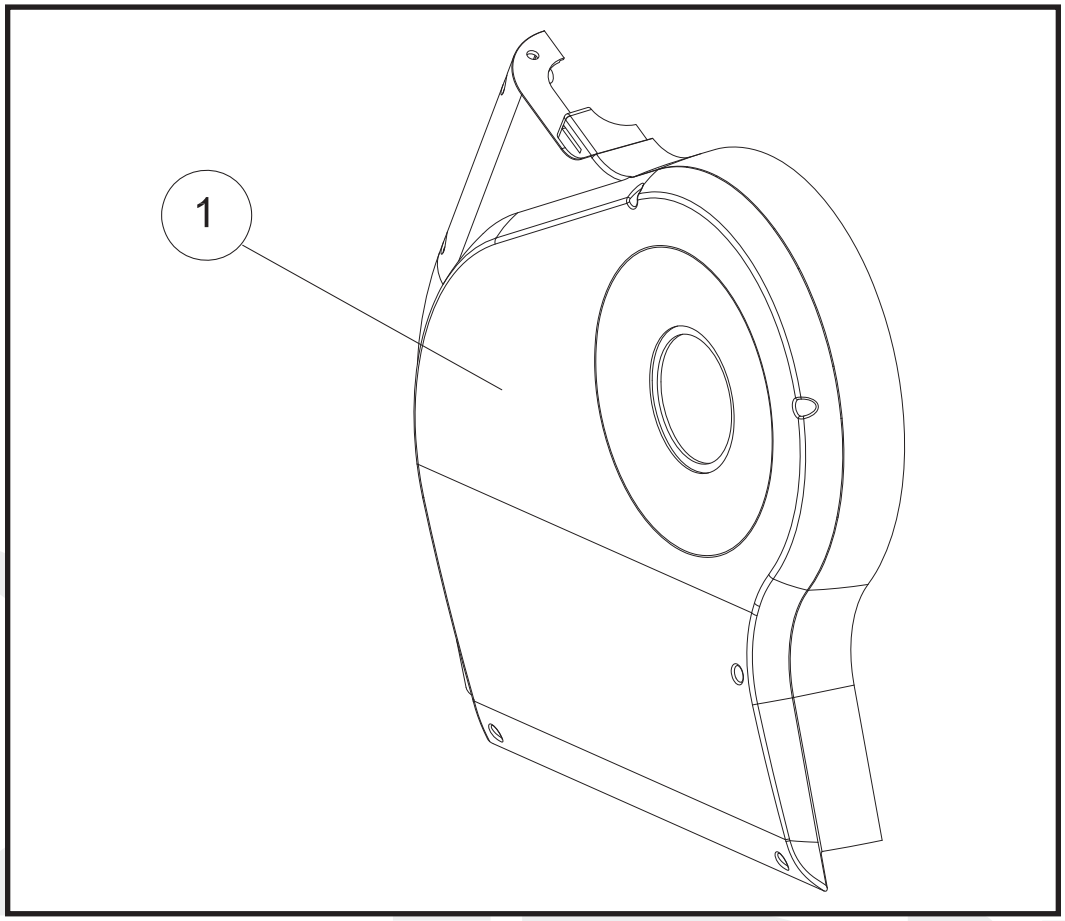


Description	Quantity	Item Number

22-50-233

Left Sidecase

500Sr & 900Sr

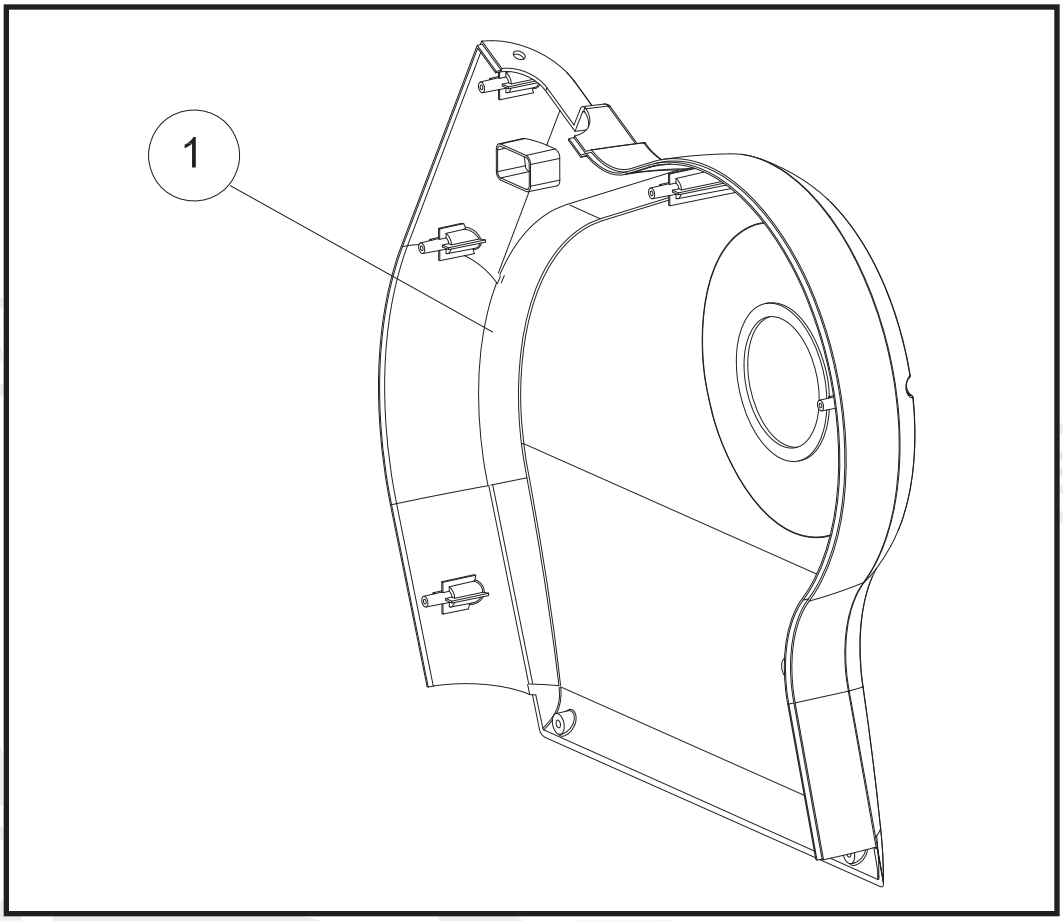


Description	Quantity	Item Number
Left Sidecase	1	1

22-50-235

Right Sidecase

500Sr & 900Sr

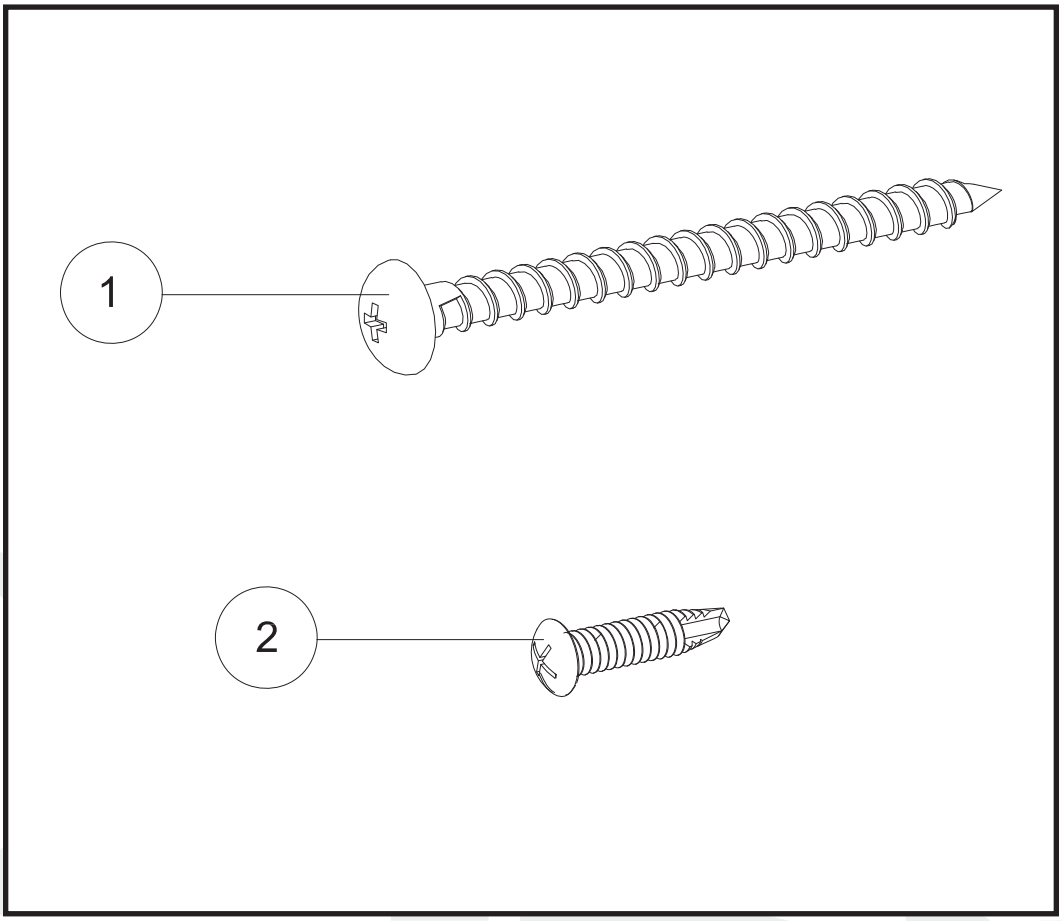


Description	Quantity	Item Number
Right Sidecase	1	1

22-50-239

Sidecase Bolt Kit

500Sr & 900Sr

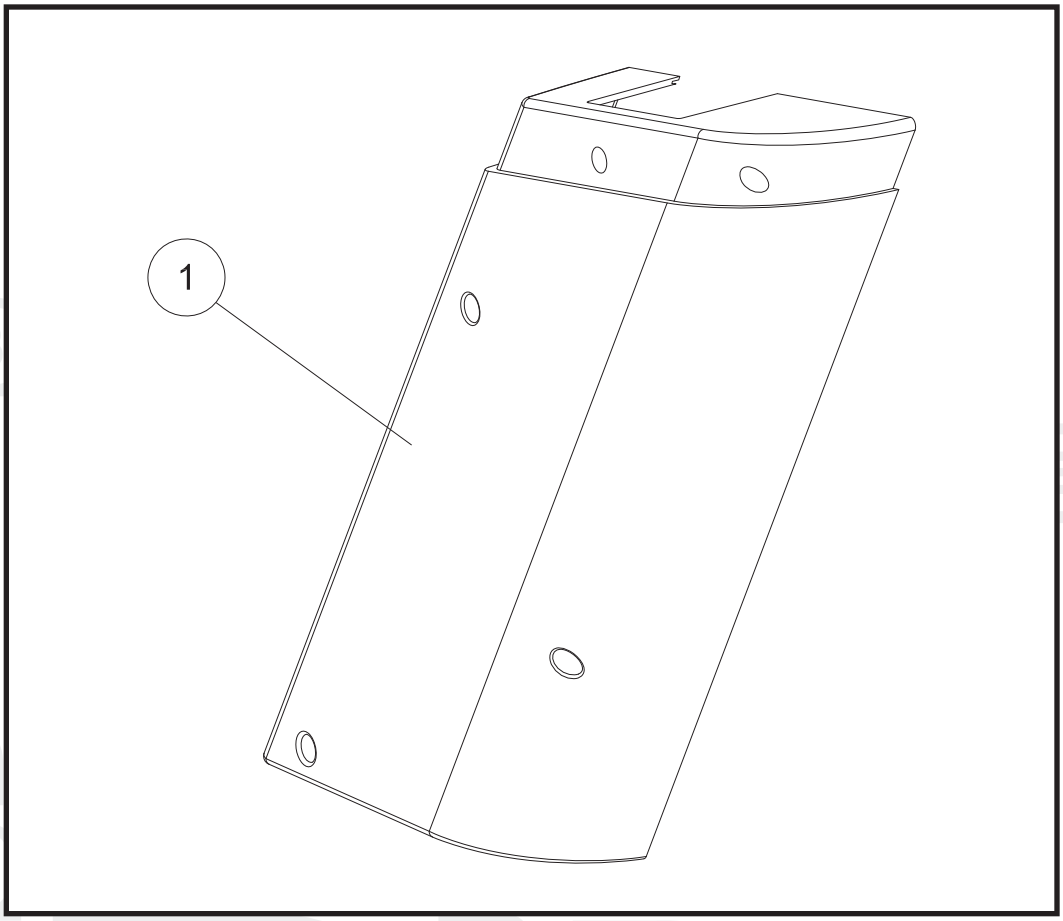


Description	Quantity	Item Number
Screw M4 x 40mm	13	
Screw 3/16" x 3/4"	12	

22-50-241

Rear Left Lower Sidecase

500Sr & 900Sr

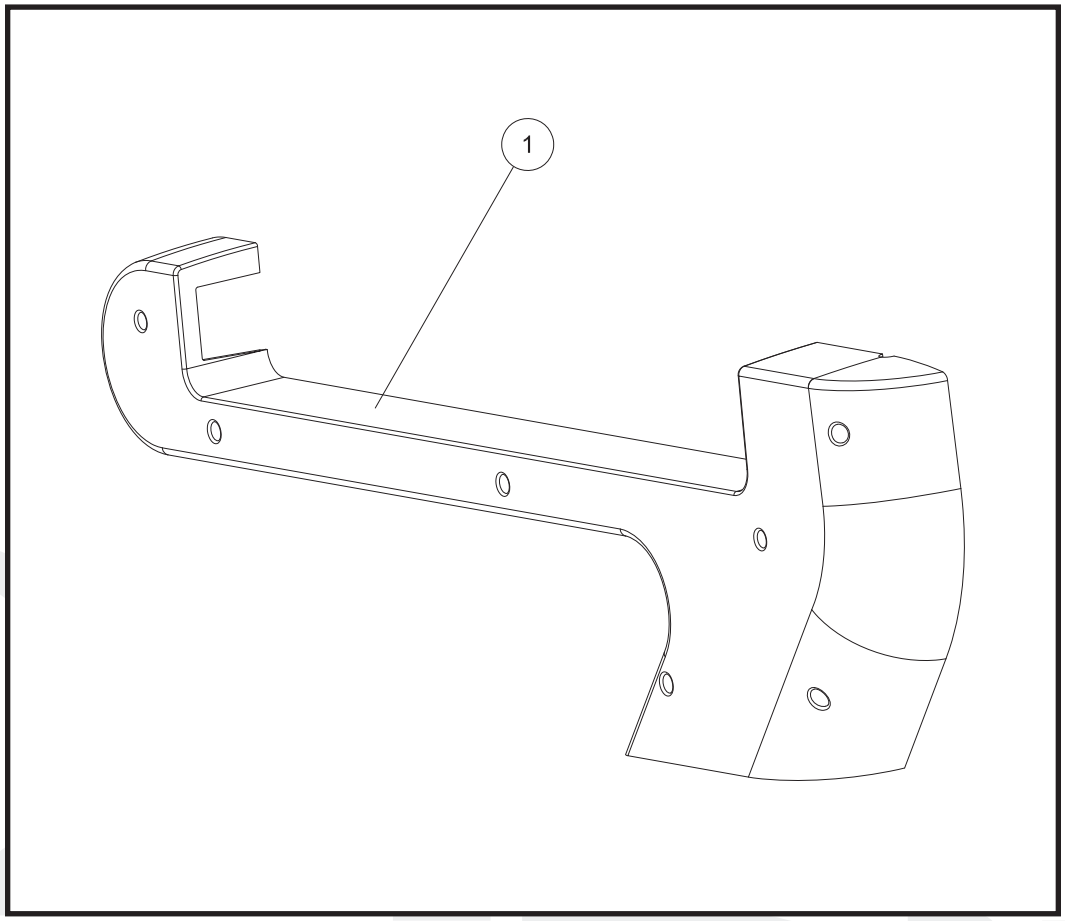


Description	Quantity	Item Number
Rear Left Lower Sidecase	1	1

22-50-243

Rear Left Upper Sidecase

500Sr

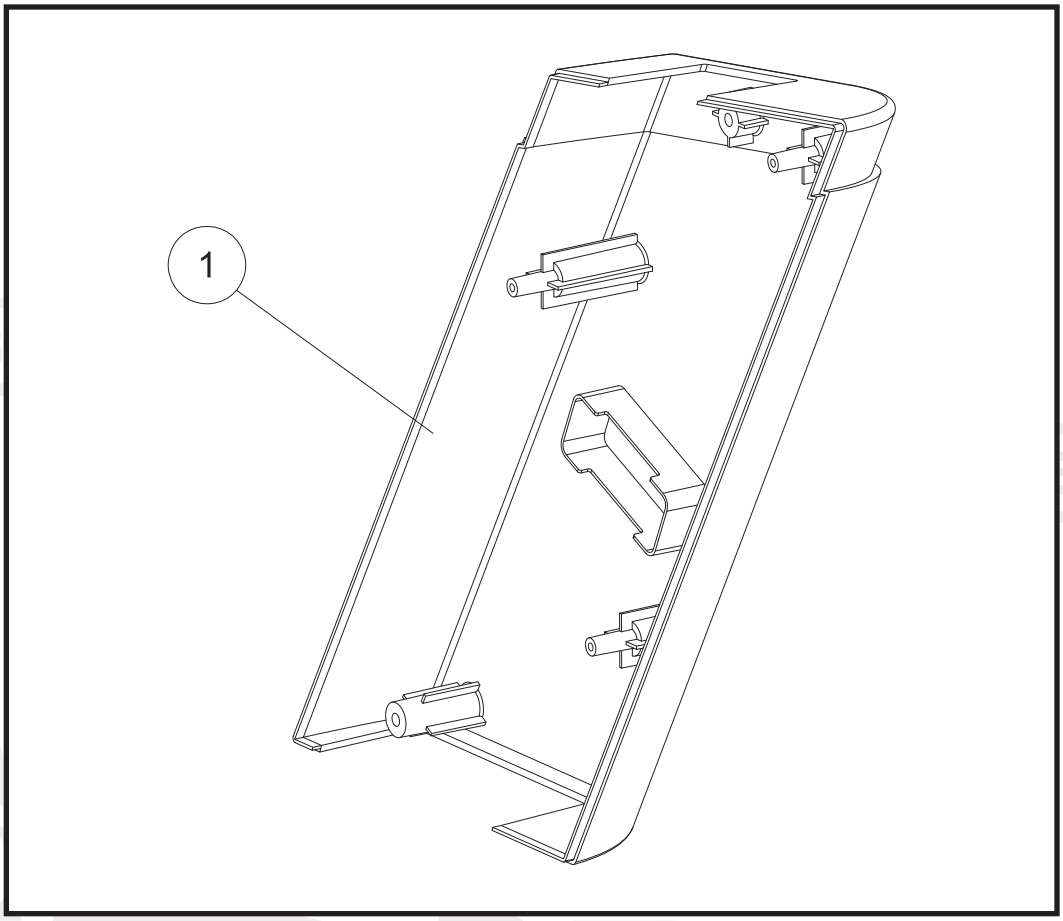


Description	Quantity	Item Number
Rear Left Upper Sidecase	1	1

22-50-245

Rear Right Lower Sidecase

500Sr & 900Sr

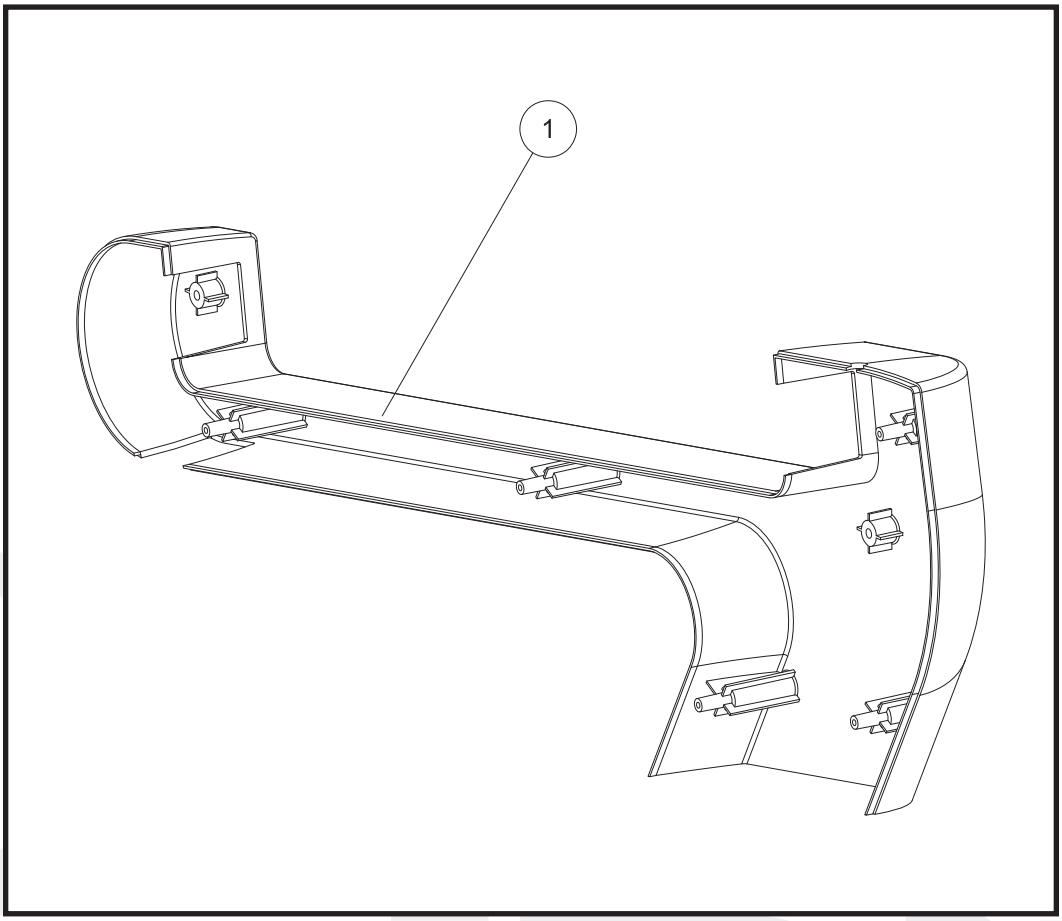


Description	Quantity	Item Number
Rear Right Lower Sidecase	1	1

22-50-247

Rear Right Upper Sidecase

500Sr & 900Sr

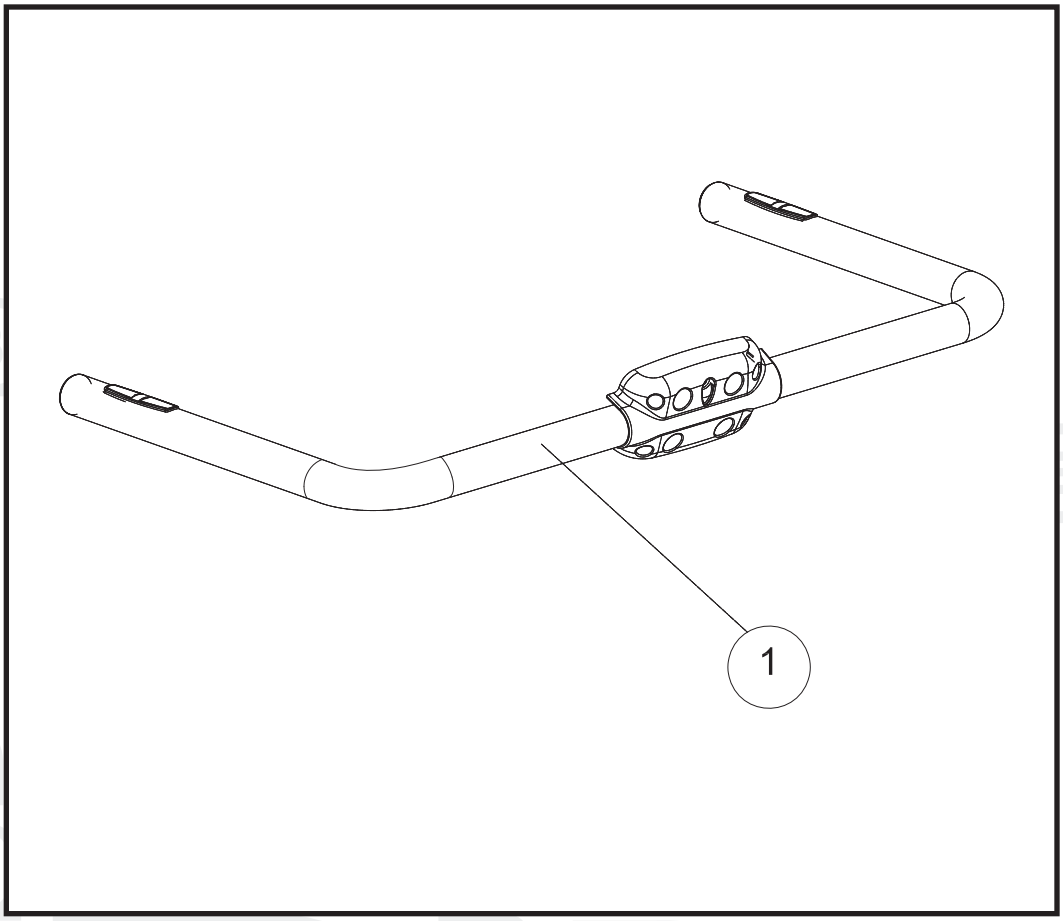


Description	Quantity	Item Number
Rear Right Upper Sidecase	1	1

22-50-255

Rear Handle Bar

500Sr

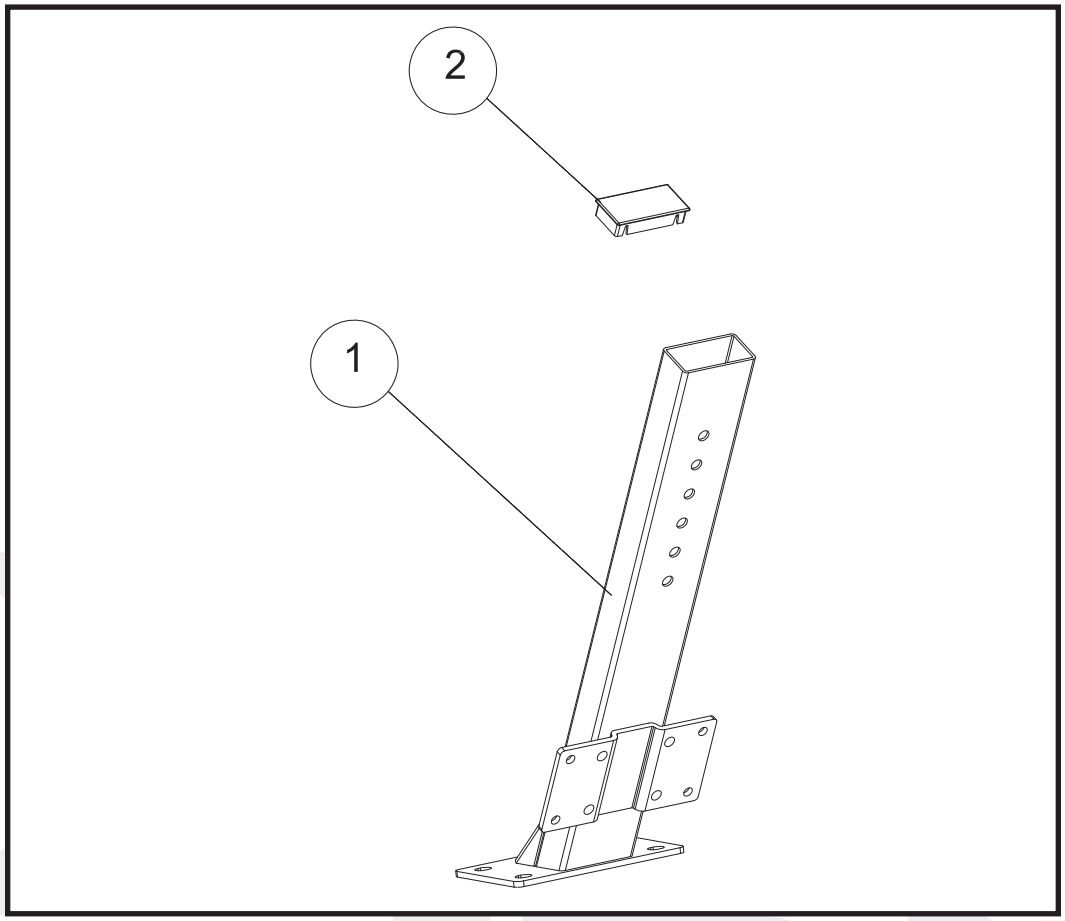


Description	Quantity	Item Number
Rear Handle Bar (Assembly)	1	1

22-50-257

Seat Back Support

500Sr & 900Sr

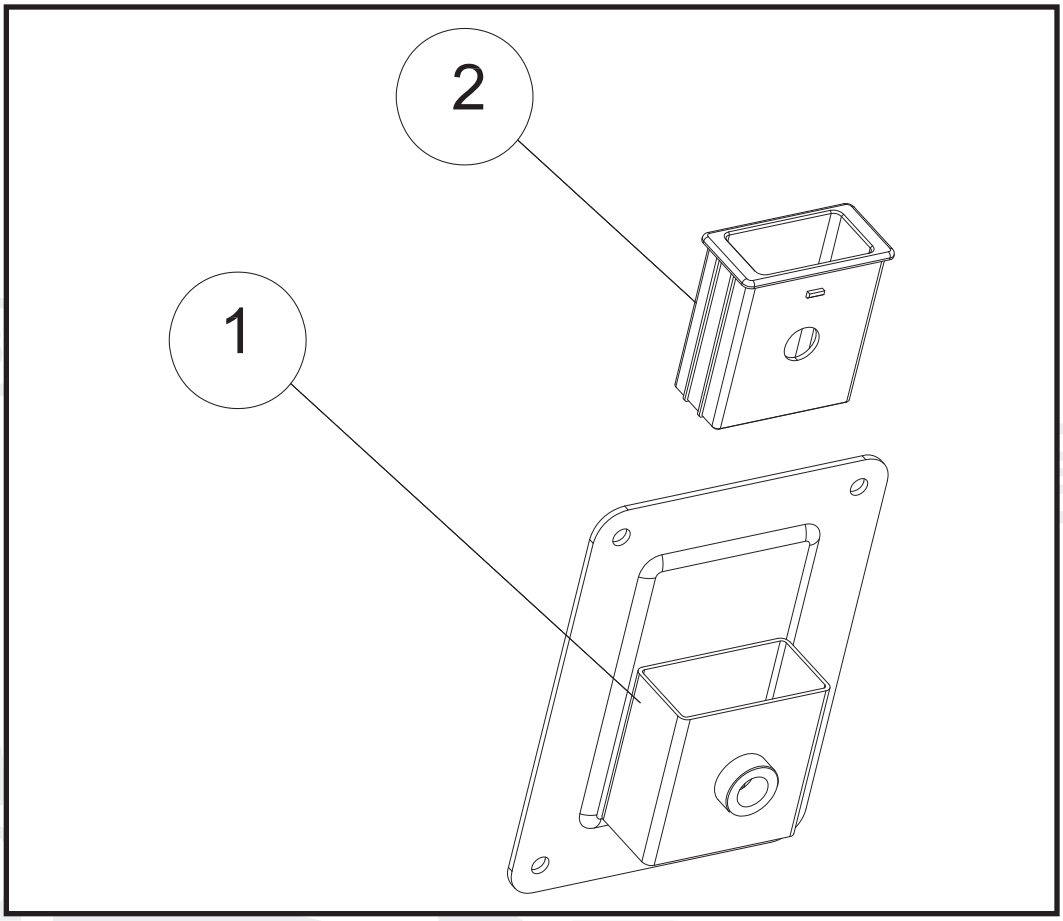


Description	Quantity	Item Number
Seat Back Support	1	1
End Cap	1	2

22-50-259

Seat Back Mount Bracket

500Sr

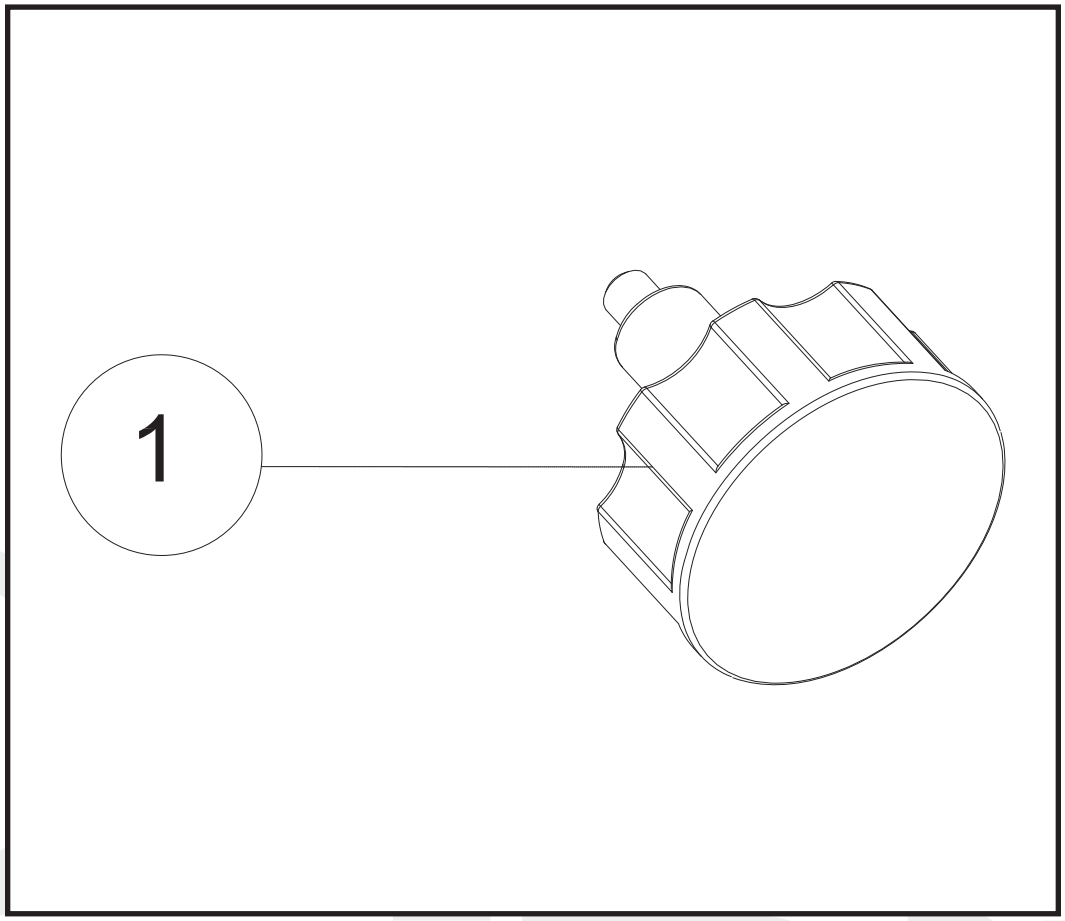


Description	Quantity	Item Number
Seat Back Mount Bracket	1	1
Bushing	1	2

22-50-261

Seat Back Adjustment Knob

500Sr & 900Sr

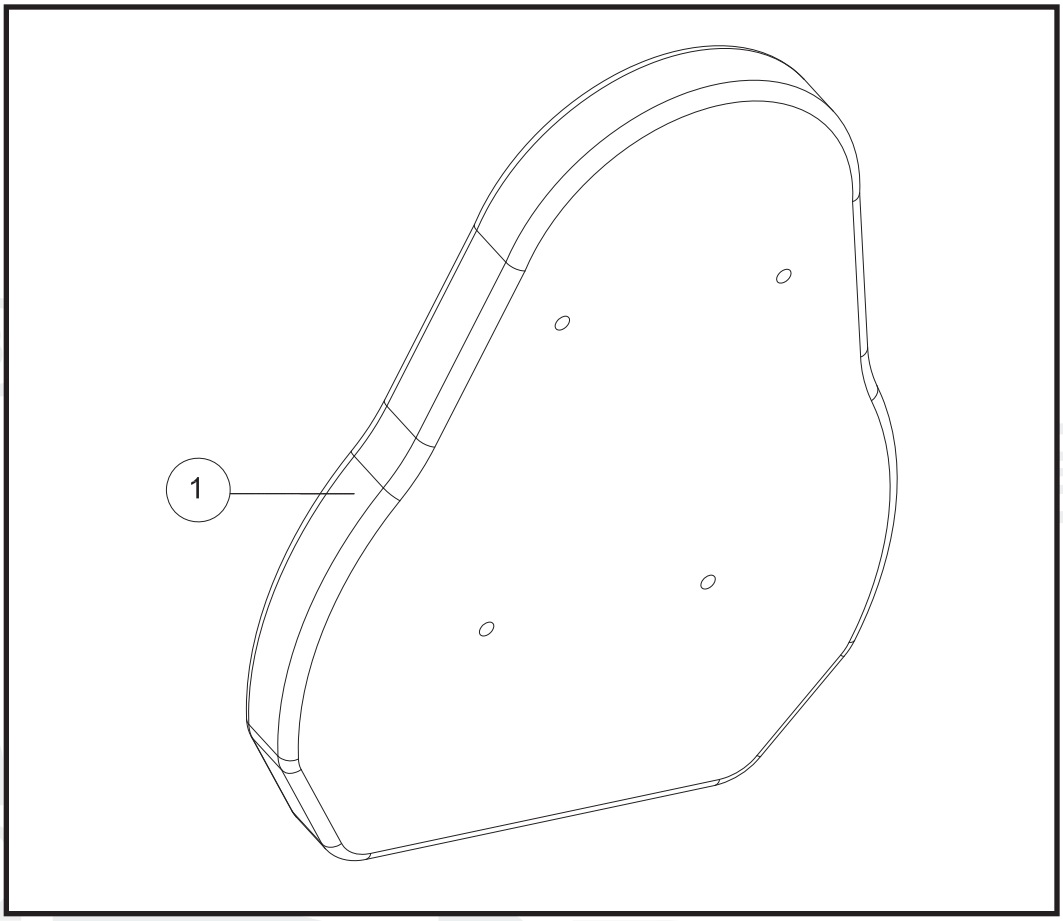


Description	Quantity	Item Number
Seat Back Adjustment Knob	1	1

22-50-263

Seat Back Pad

500Sr

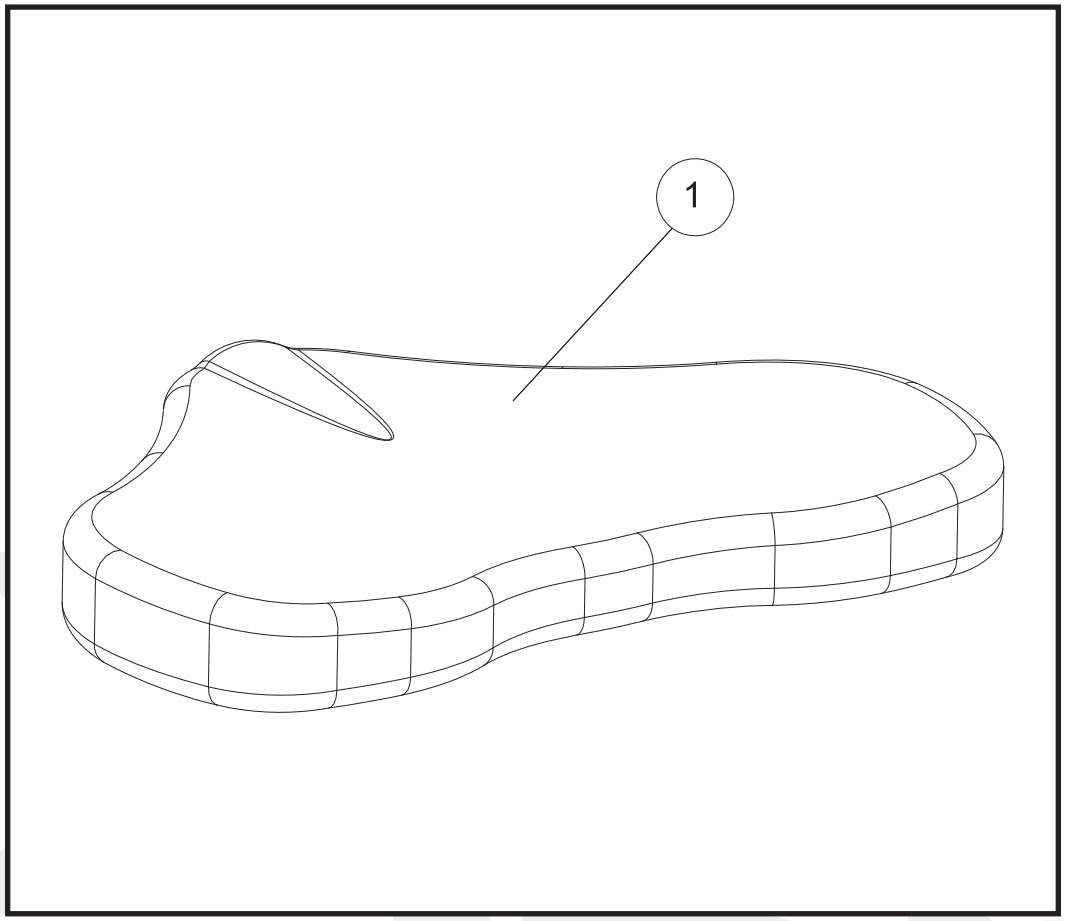


Description	Quantity	Item Number
Seat Back Pad	1	1

22-50-265

Seat Pad

500Sr

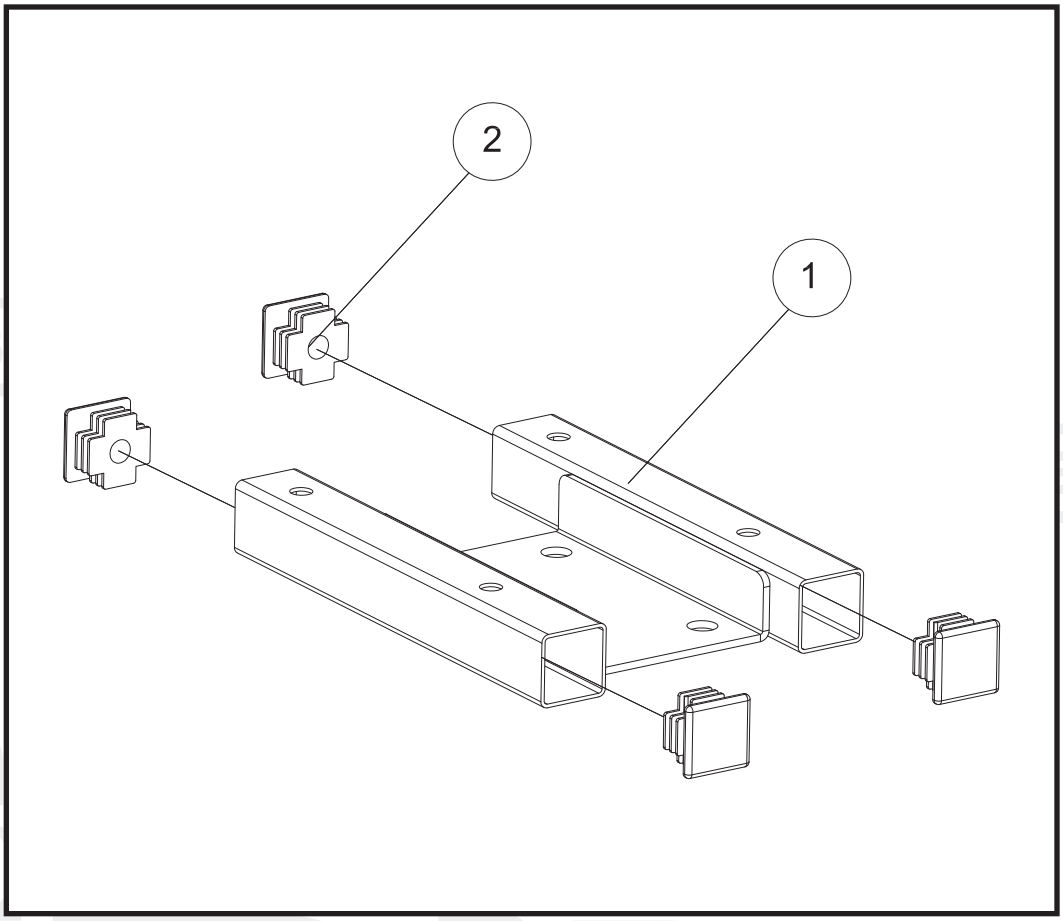


Description	Quantity	Item Number
Seat Pad	1	1

22-50-267

Seat Mount Bracket

500sr

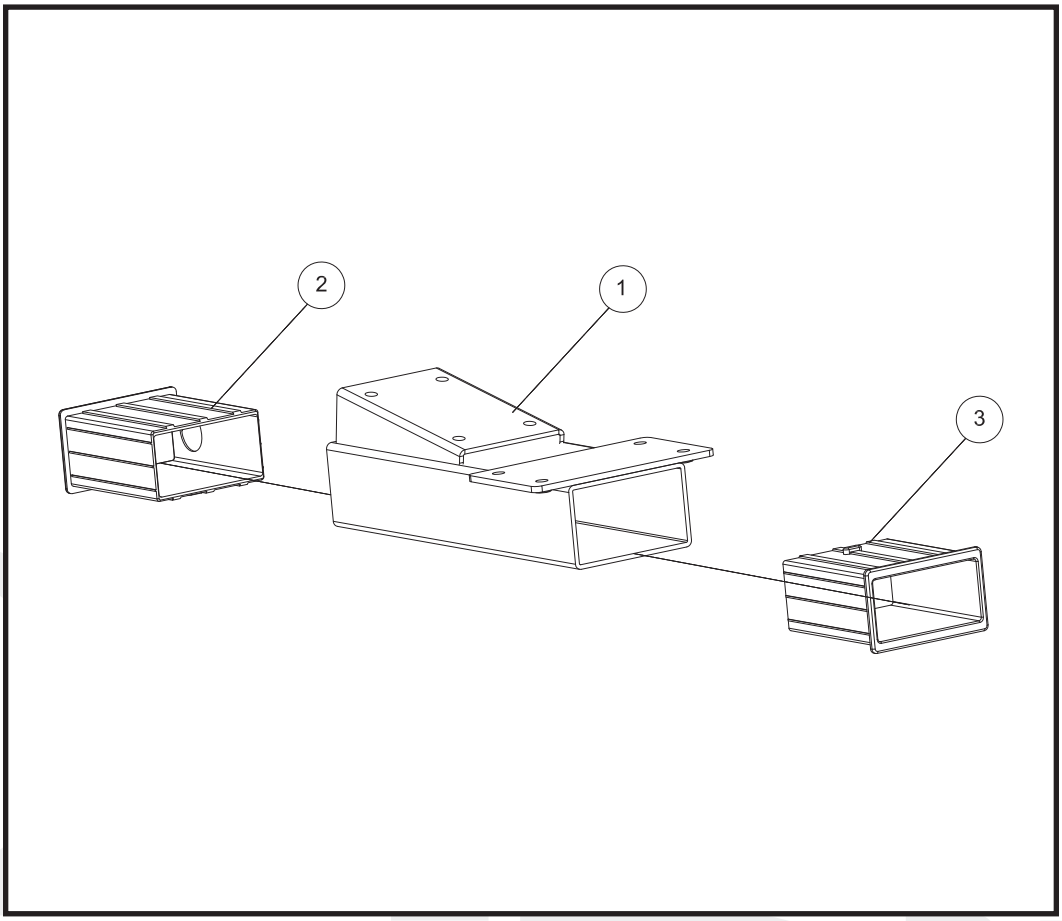


Description	Quantity	Item Number
Seat Mount Bracket	1	1
End Cap	4	2

22-50-269

Seat Slide Frame

500Sr

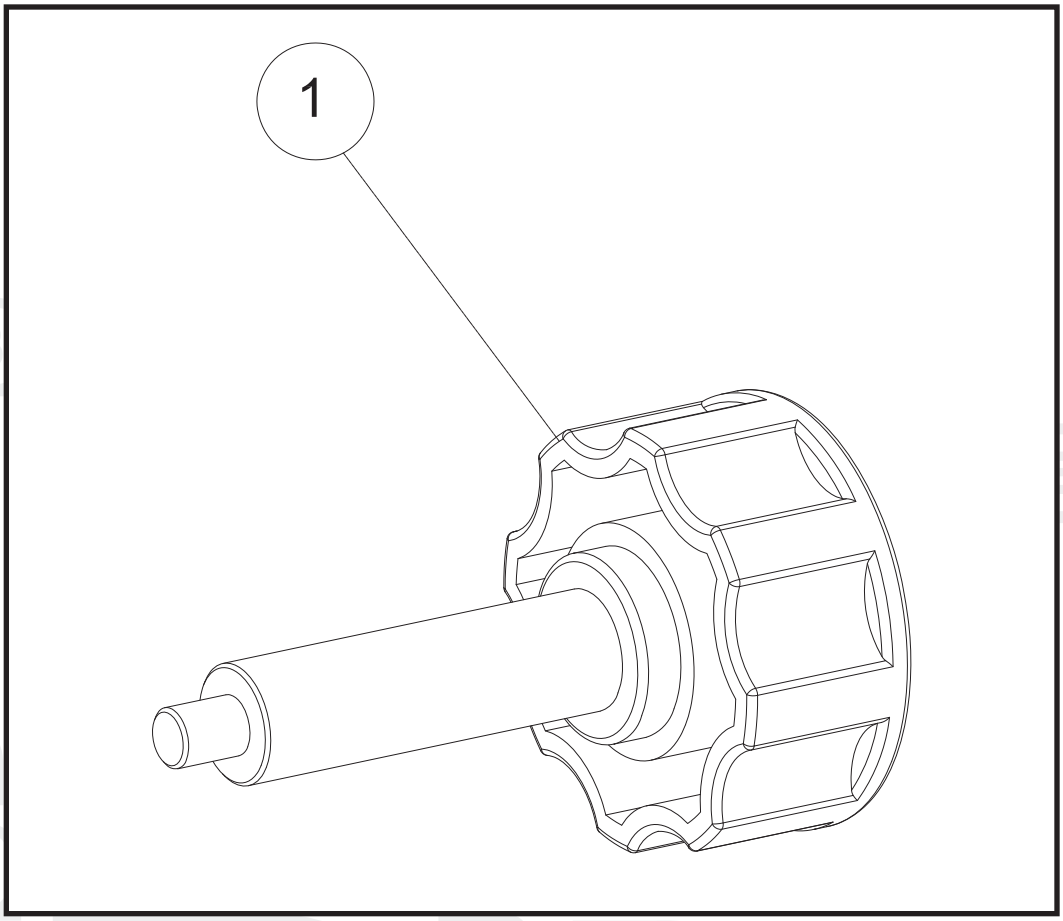


Description	Quantity	Item Number
Seat Slide Frame	1	1
Front Bushing	1	2
Rear Bushing	1	3

22-50-271

Seat Slide Adjustment Knob

500Sr

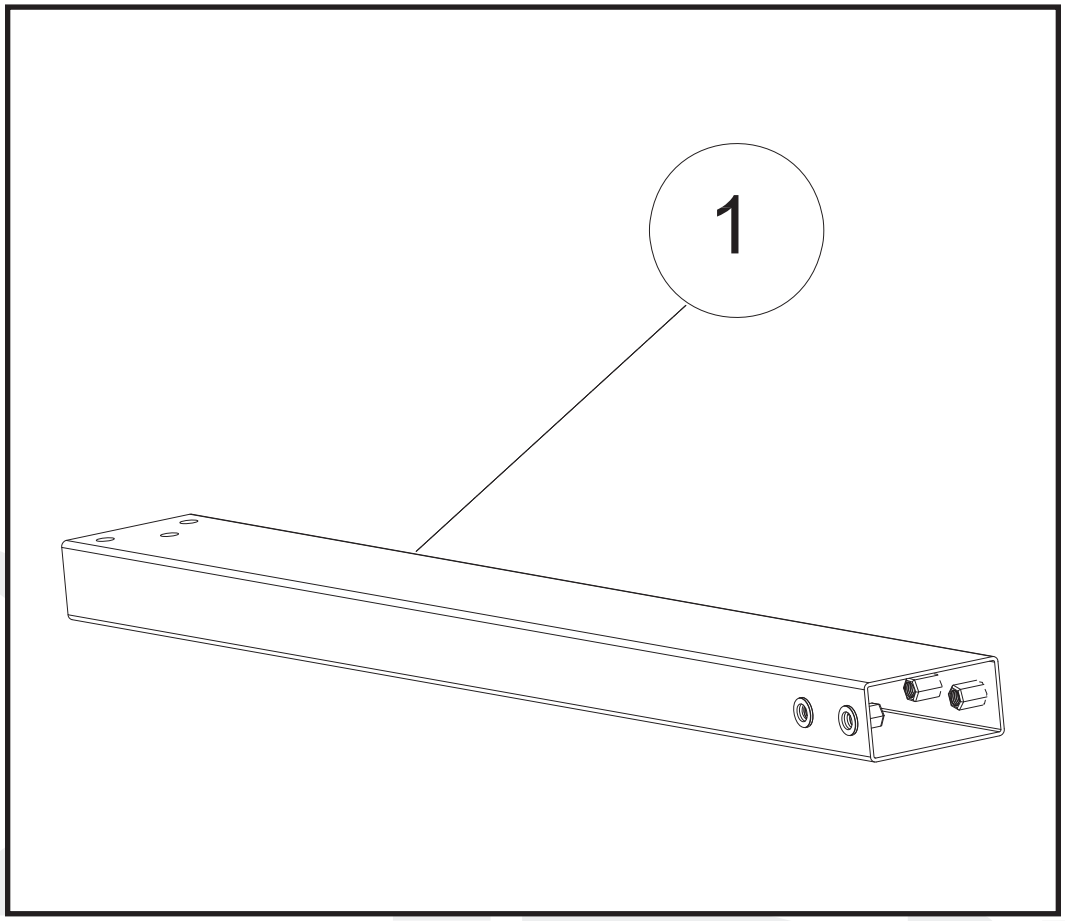


Description	Quantity	Item Number
Seat Slide Adjustment Knob	1	1

22-50-273

Seat Tube

500Sr

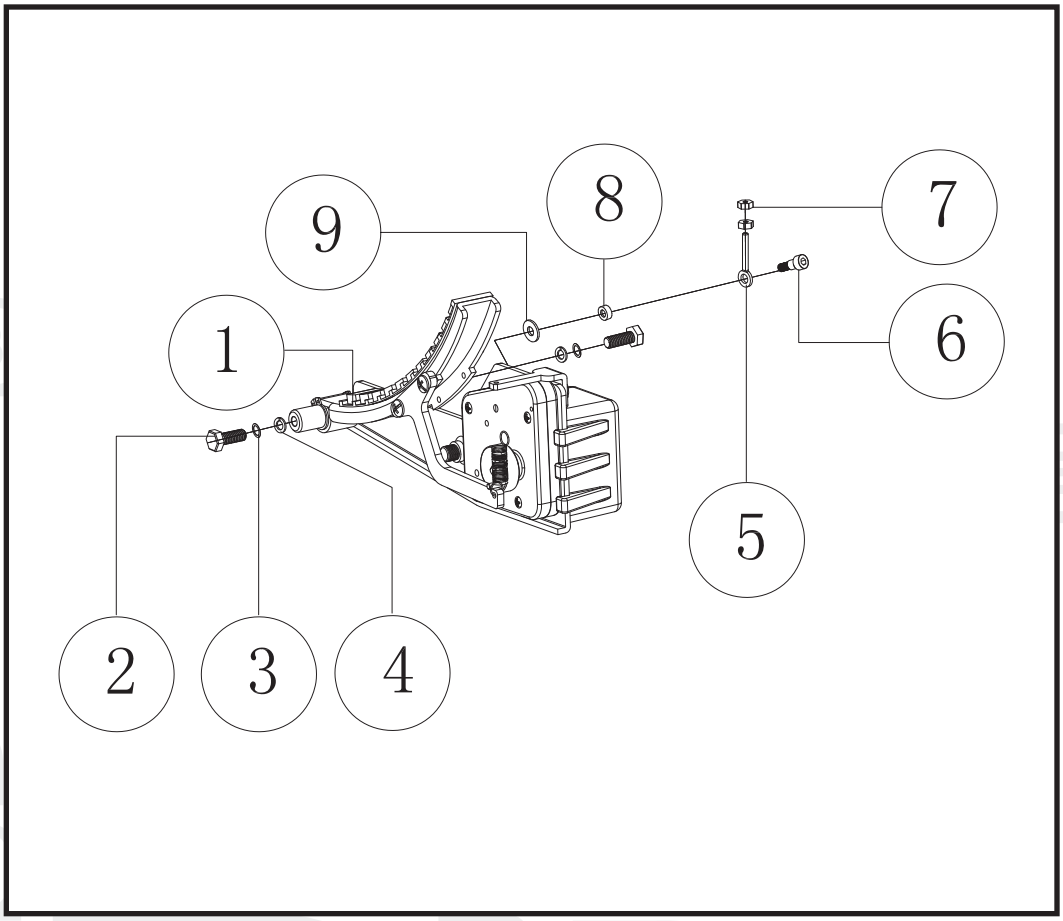


Description	Quantity	Item Number
Seat Tube	1	1

22-50-283

Brake Assembly

500Sr & 900Sr

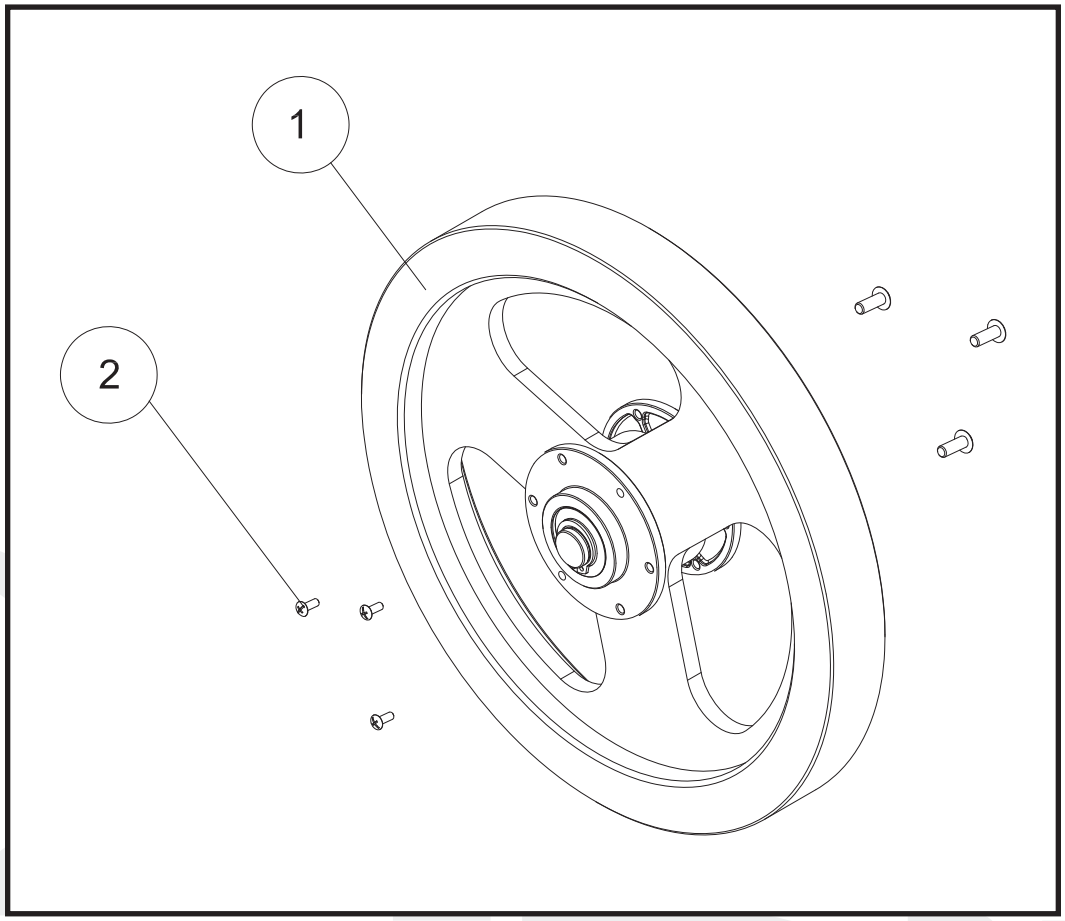


Description	Quantity	Item Number
Brake Assembly	1	1
Bolt M6 x 16mm	2	2
Flat Washer 6 x 13 x 1	2	3
Lock Washer	2	4
Adjustment Bolt M6 x 63mm	1	5
Bolt M8 x 22mm	1	6
Hex Nuts M6	2	7
Spacer	1	8
Flat Washer 8 x 19 x 2	1	9

22-50-285

Flywheel Assembly

500Sr

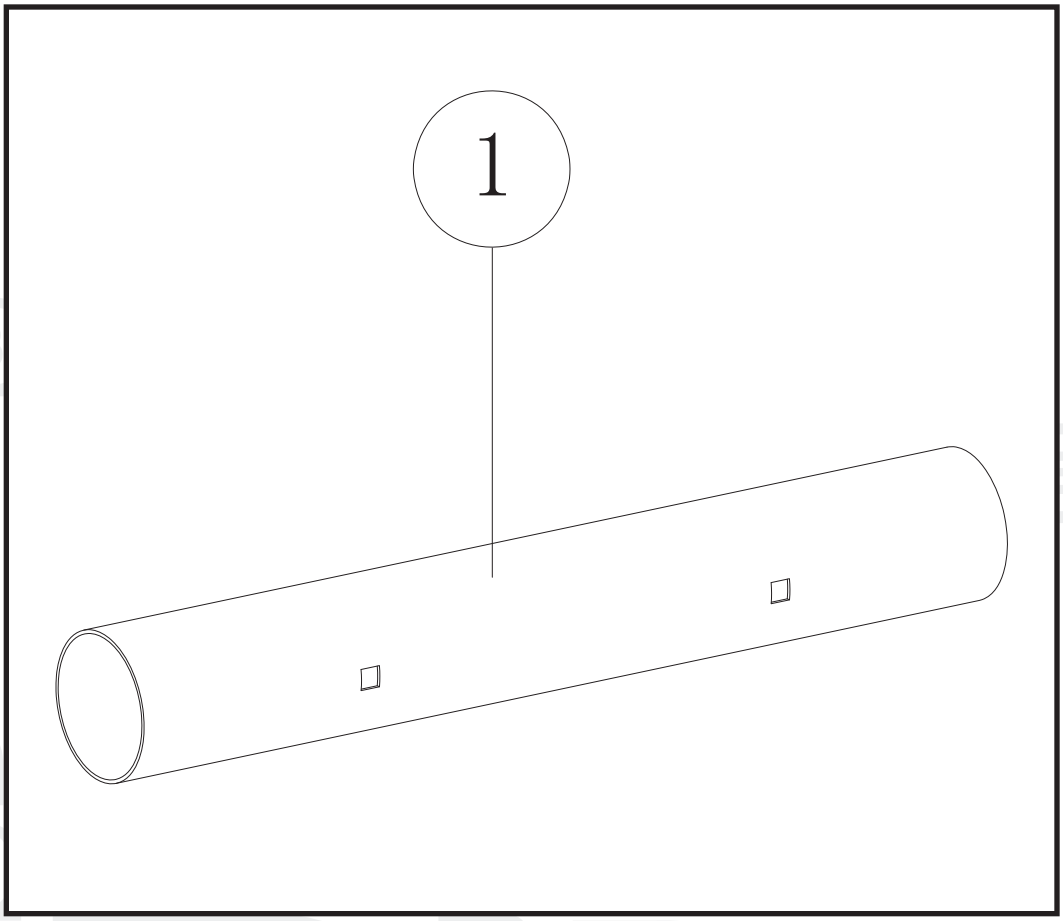


Description	Quantity	Item Number
Flywheel Assembly with mounting brackets	1	1
Screw M5 x 10mm	6	2

22-50-289

Front Stabilizer Bar

500Sr

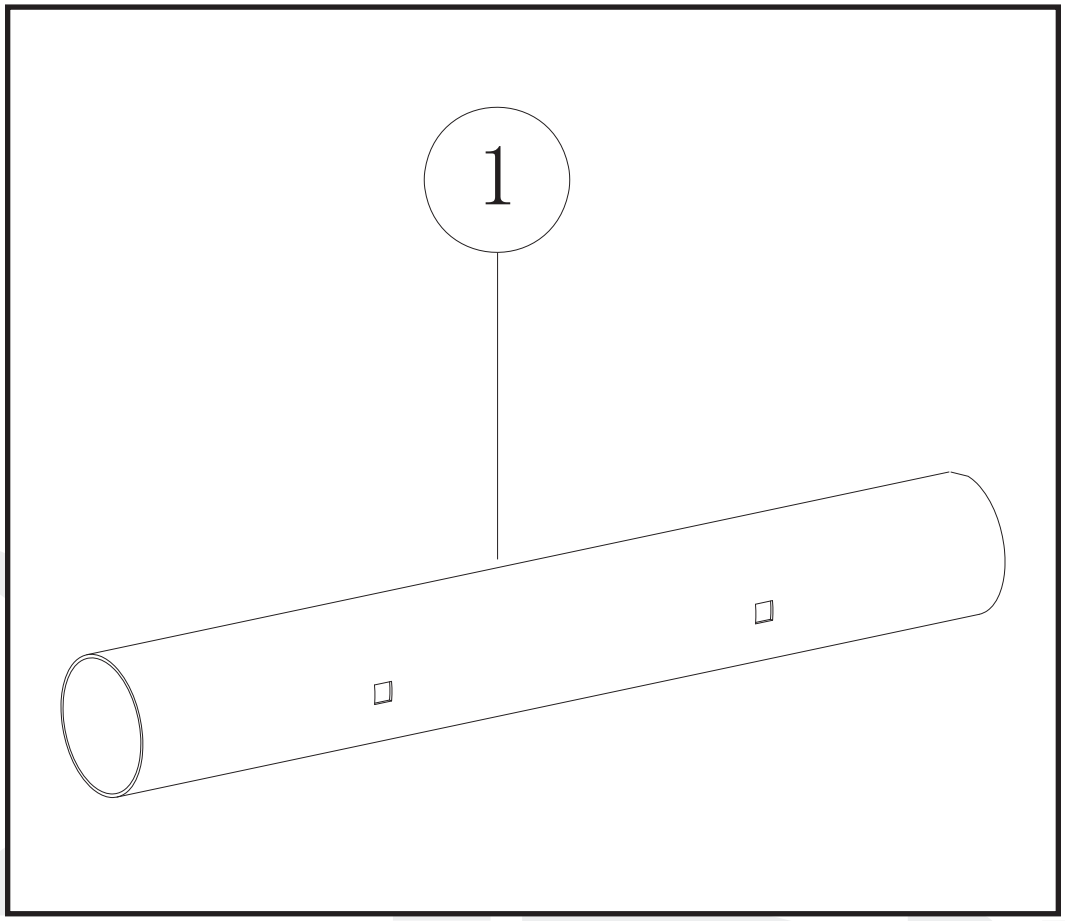


Description	Quantity	Item Number
Front Stabilizer Bar	1	1

22-50-291

Rear Stabilizer Bar

500Sr

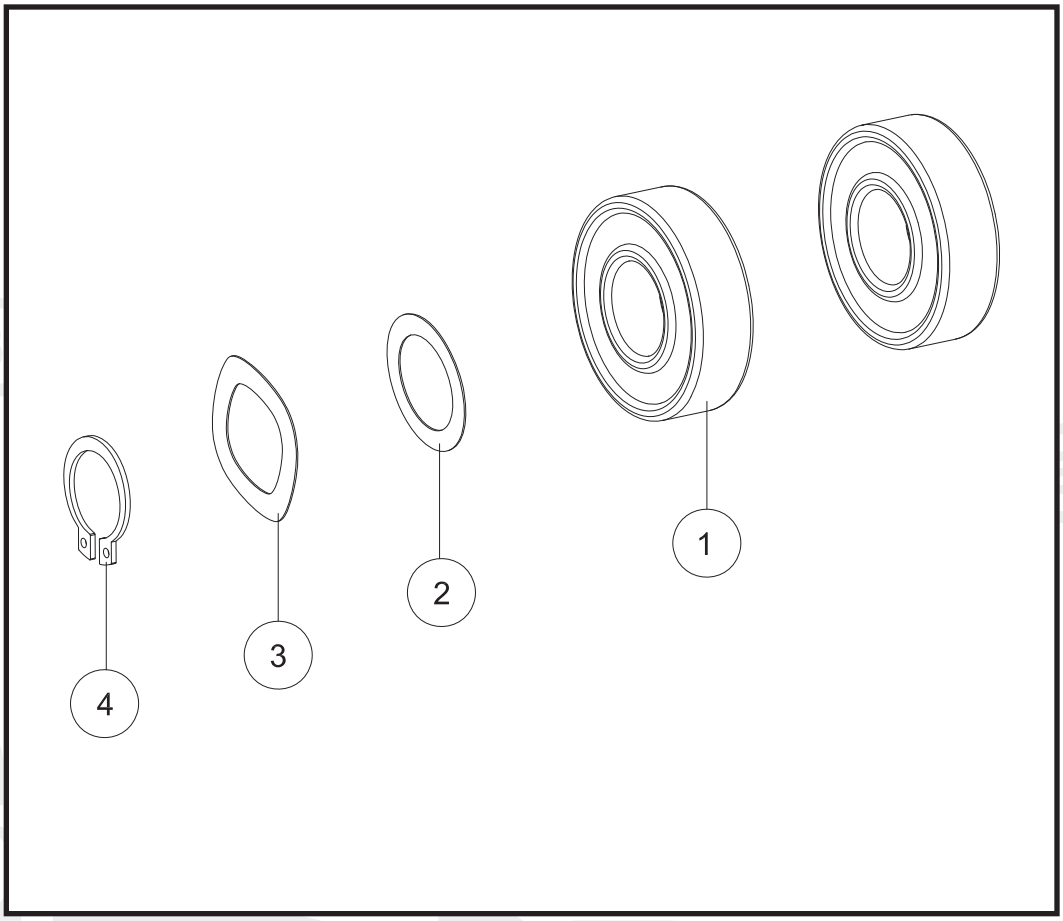


Description	Quantity	Item Number
Rear Stabilizer Bar	1	1

22-50-293

BB Bearing Set

500Sr

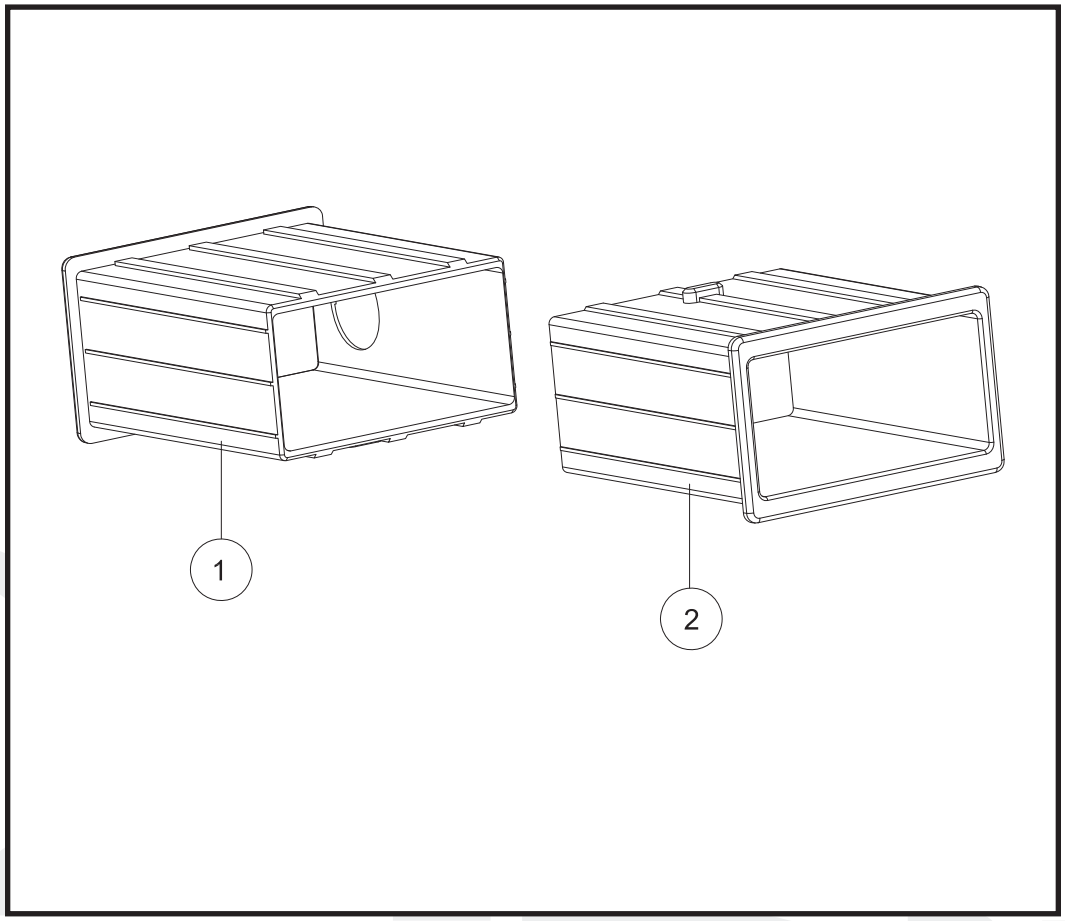


Description	Quantity	Item Number
Bearings 6203 (RS)	2	1
Flat Washer	1	2
Wavy Washer	1	3
C Clip	1	4

22-50-295

Seat Slide Bushings

500Sr

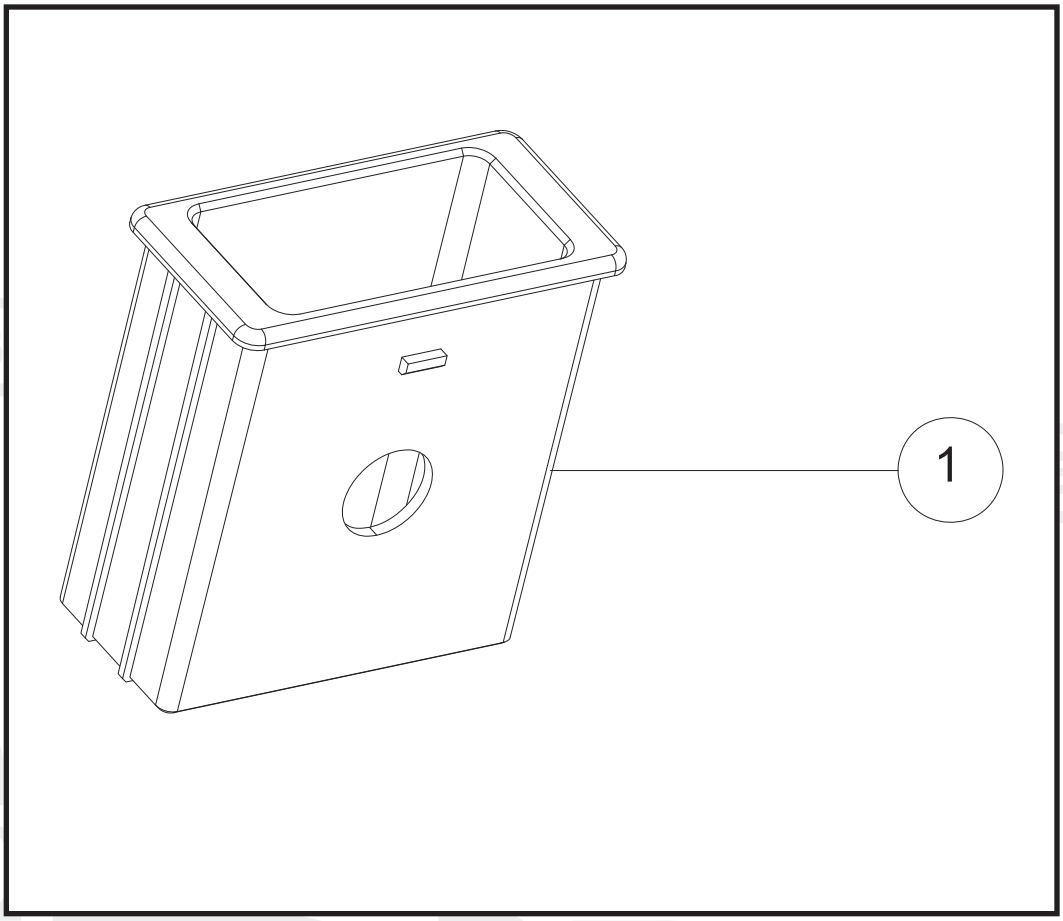


Description	Quantity	Item Number
Front Bushing	1	1
Rear Bushing	1	2

22-50-297

Seat Mount Bracket Bushing

500Sr



Description	Quantity	Item Number
Bushing	1	1

900Ub Parts List

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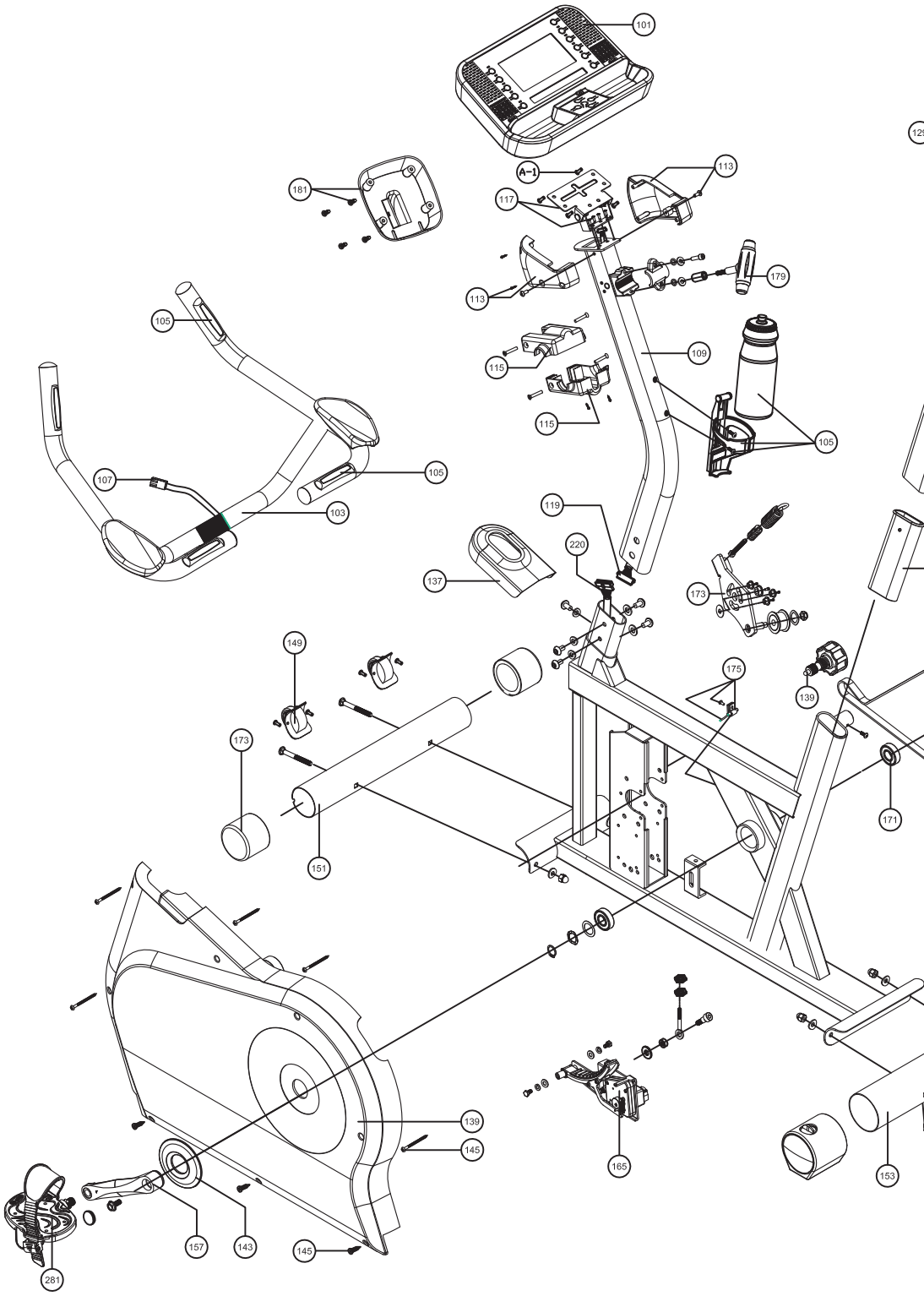
900Ub Explo


101
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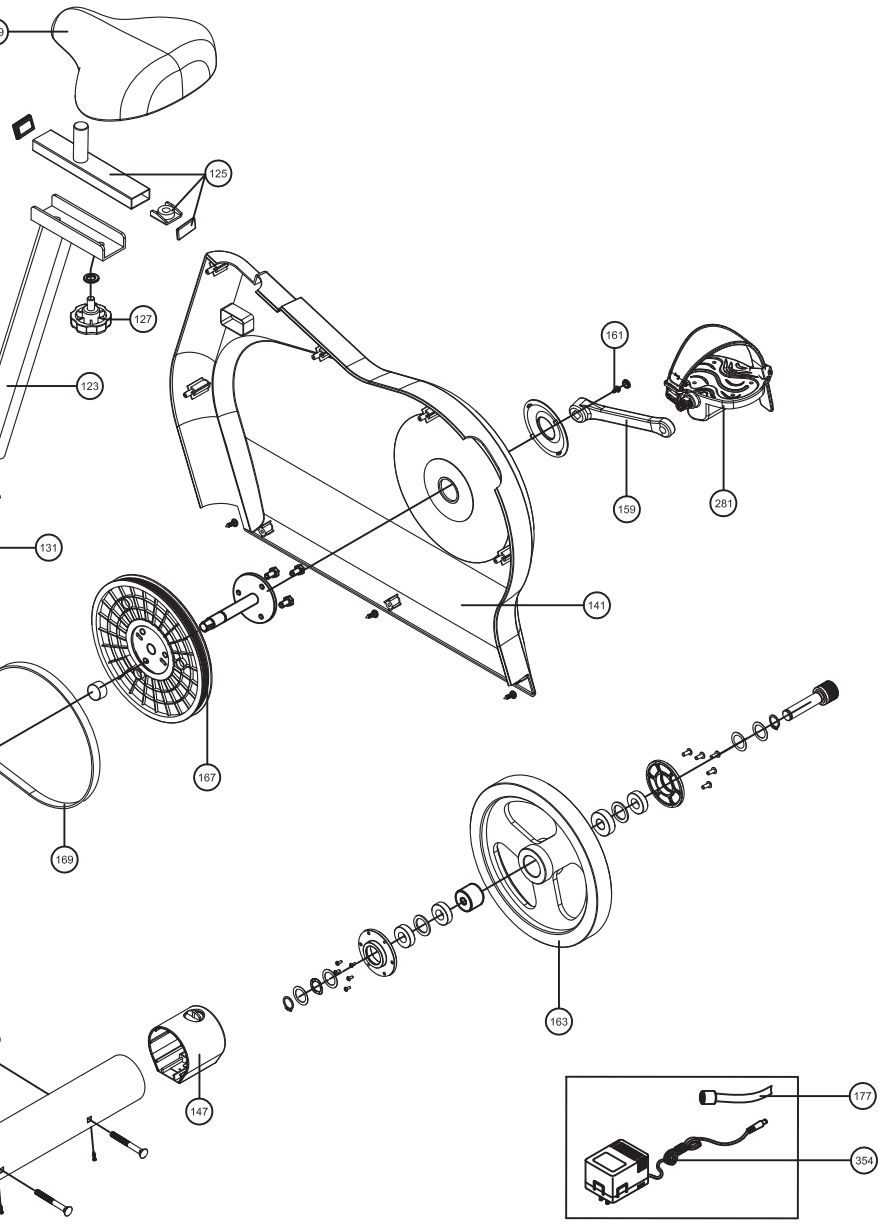
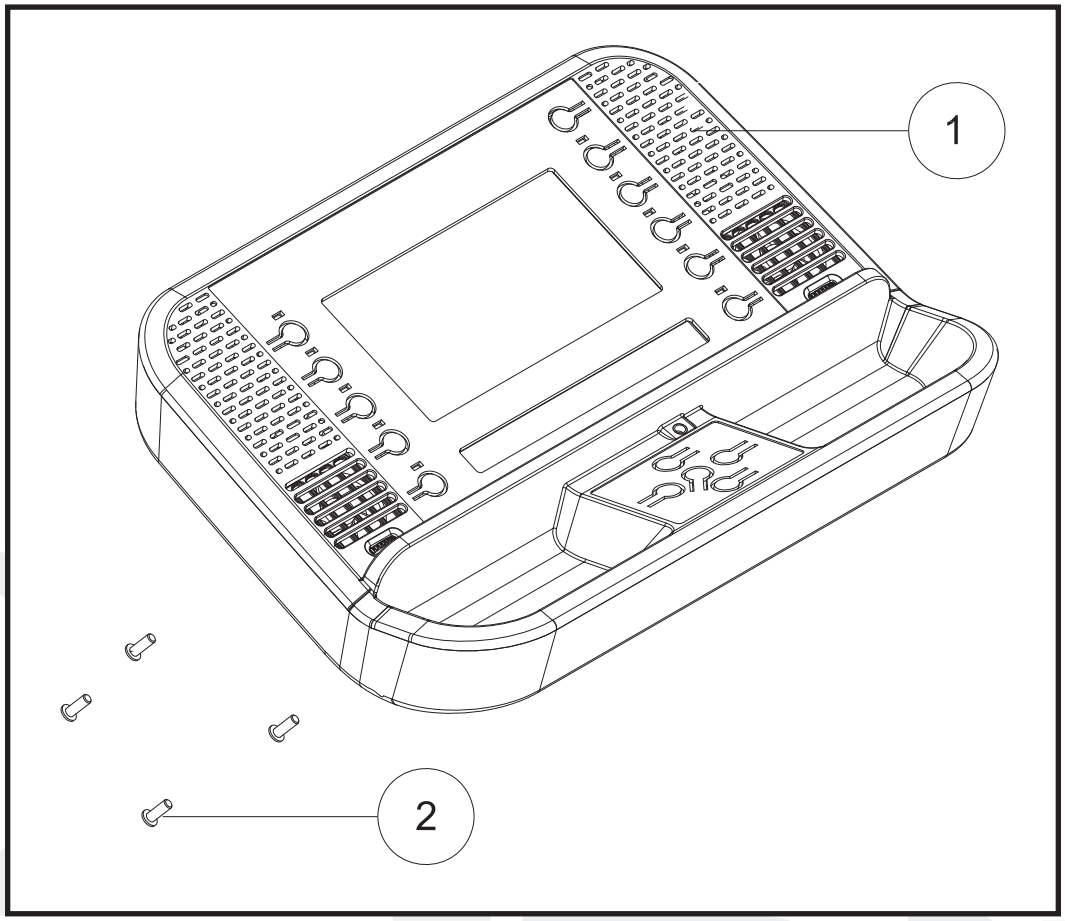
ded Drawing



22-90-101

Console Assembly

900Ub/900Sr

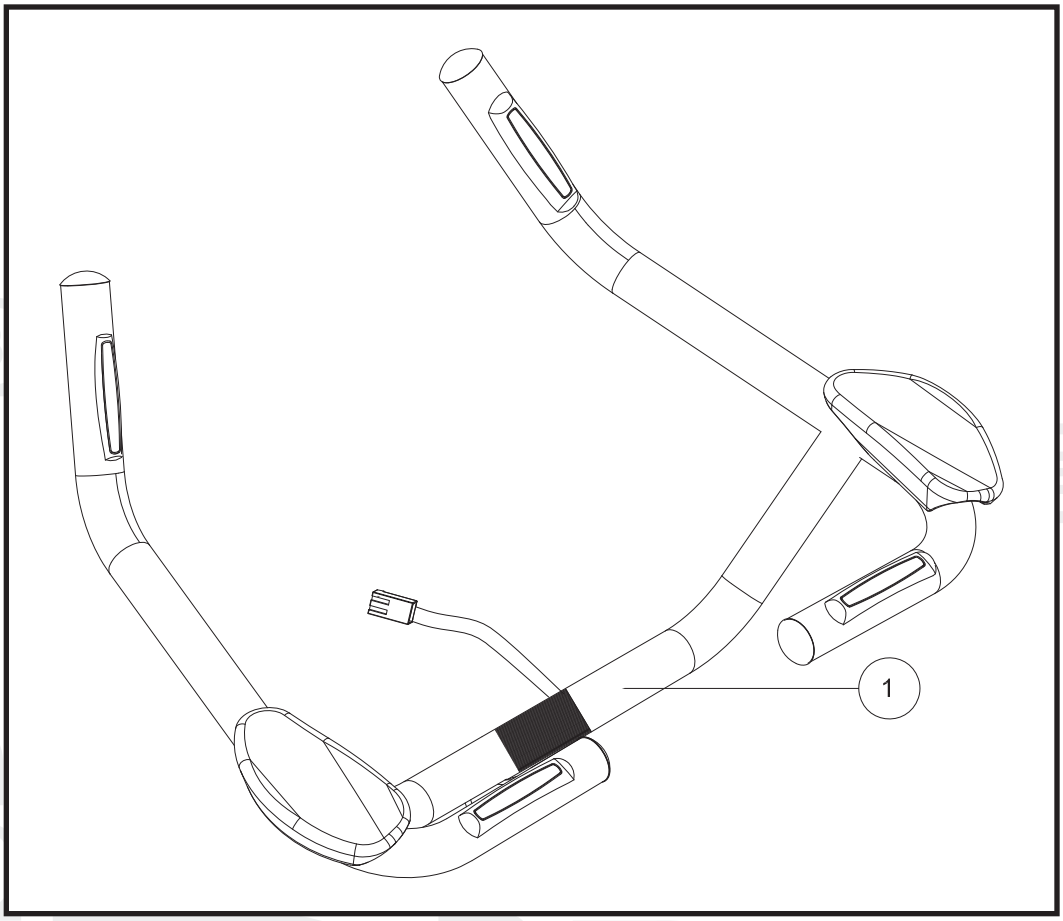


Description	Quantity	Item Number
Console	1	1
Screw M5 x 10mm	4	2

22-90-103

Handle Bar Assembly

900Ub

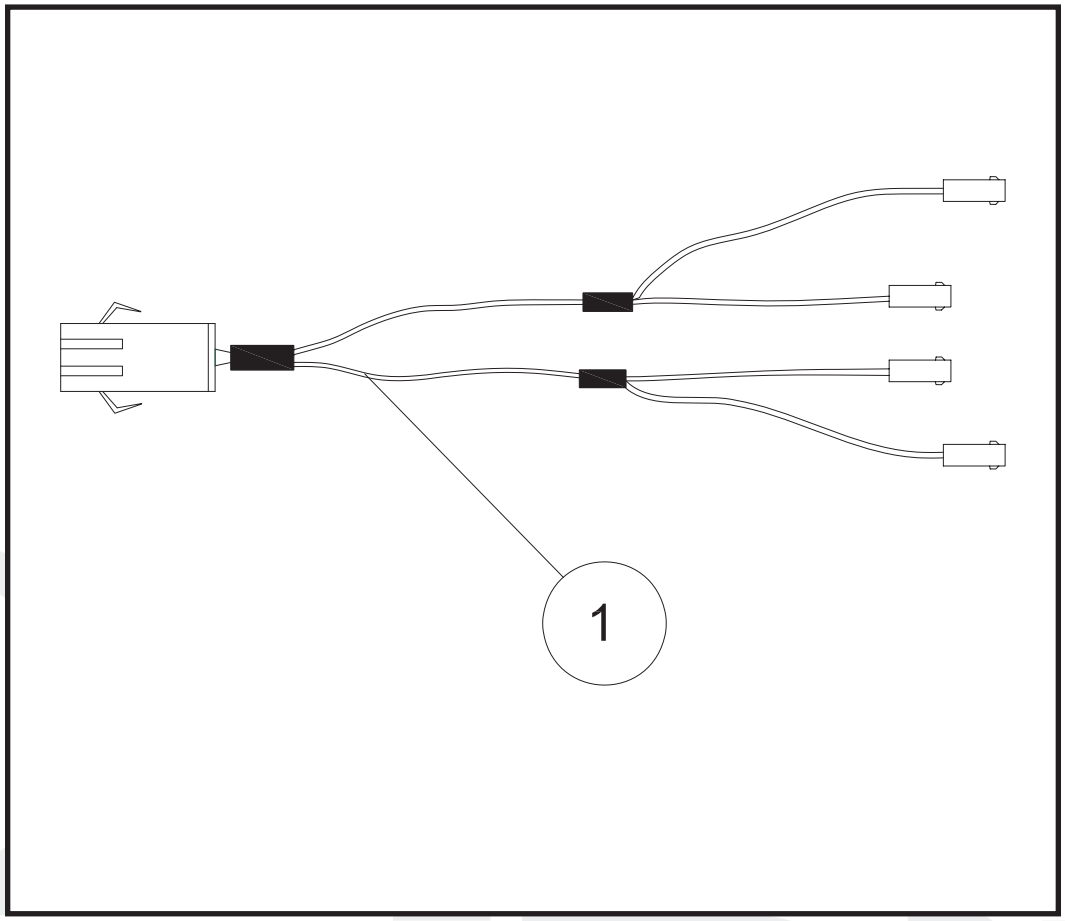


Description	Quantity	Item Number
Handle Bar Assembly	1	1

22-90-107

HP Wire Harness - Handle Bar

900Ub

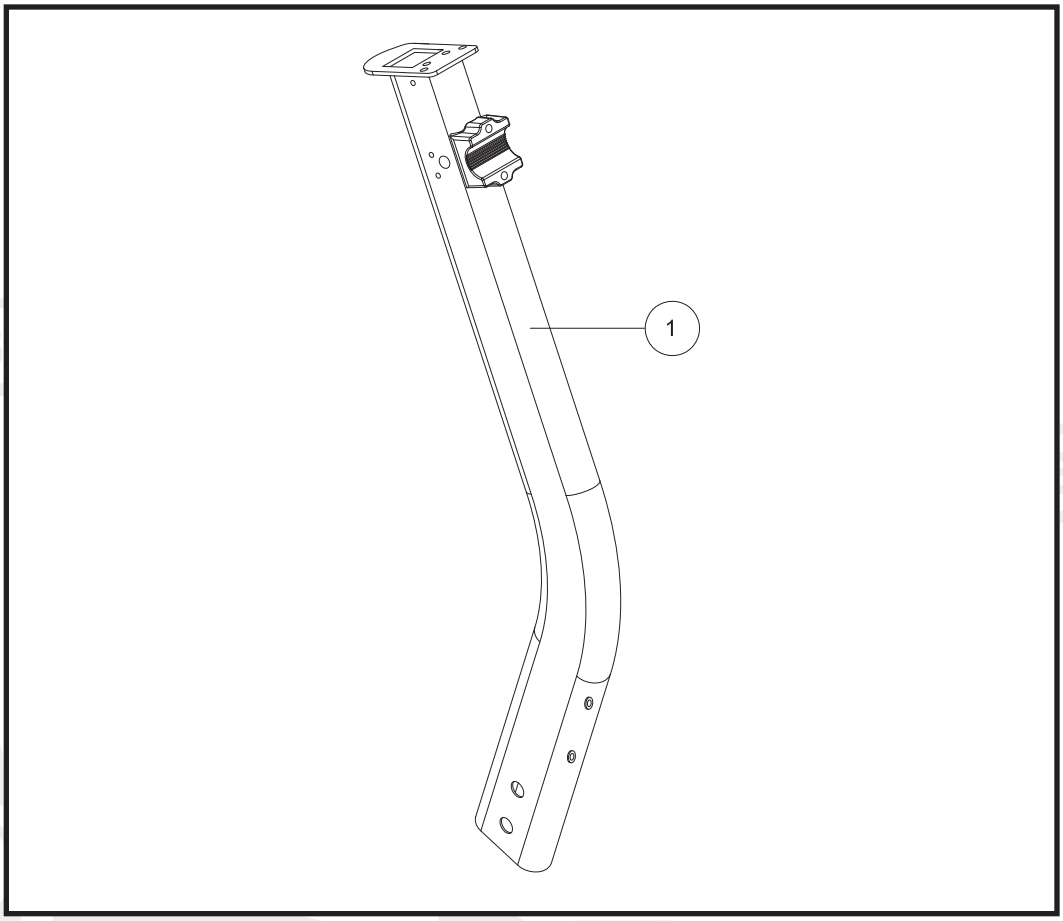


Description	Quantity	Item Number
HP Wire Harness	1	1

22-90-109

Console Mast

900Ub

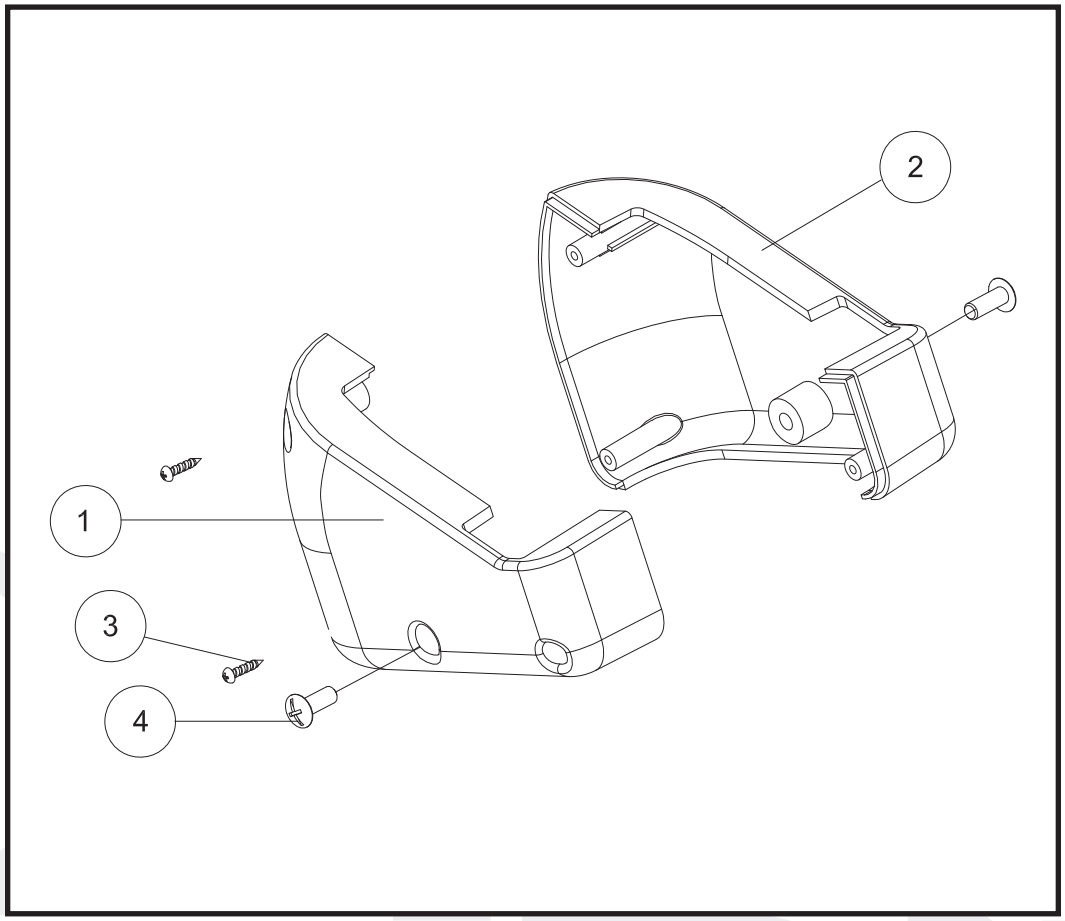


Description	Quantity	Item Number
Console Mast	1	1

22-90-113

Console Mount covers

900Ub/900Sr

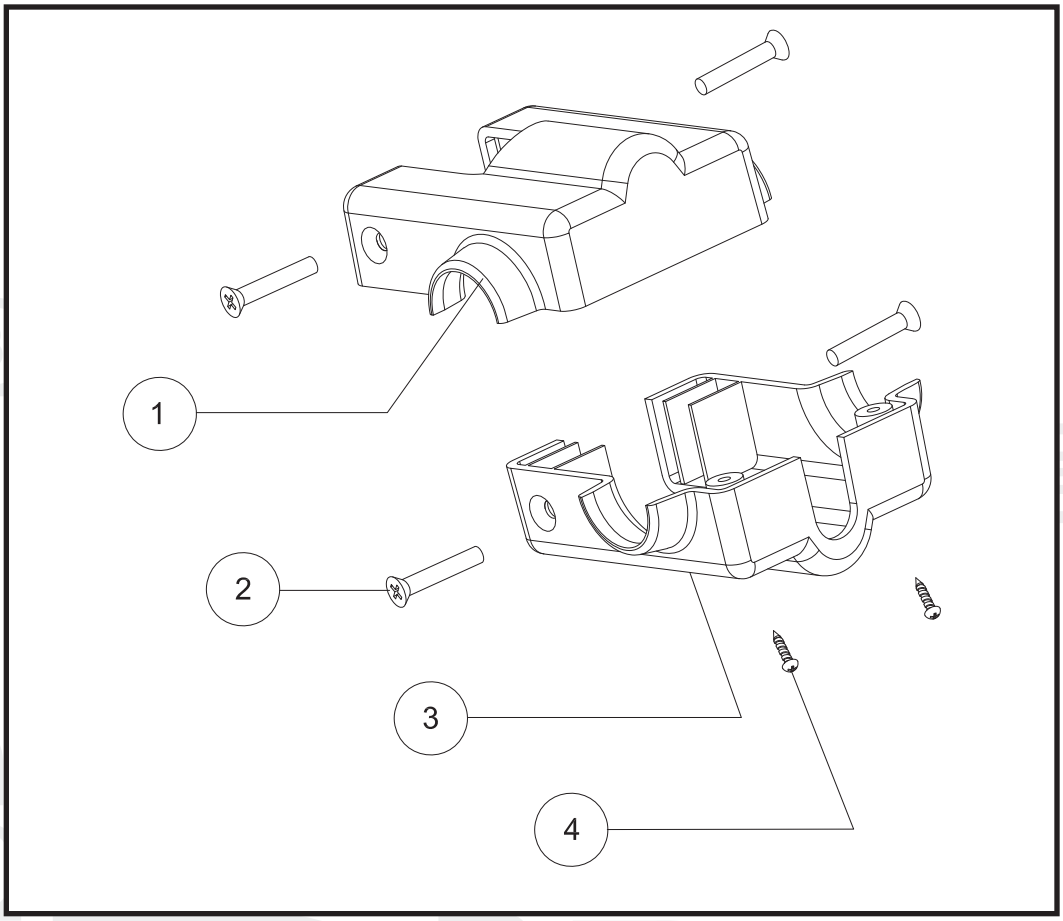


Description	Quantity	Item Number
Left Console Mount Cover	1	1
Right Console Mount Cover	2	2
Screws M3 x 14mm	3	3
Screws M5 x 14mm	2	4

22-90-115

Handle Bar Covers

900Ub

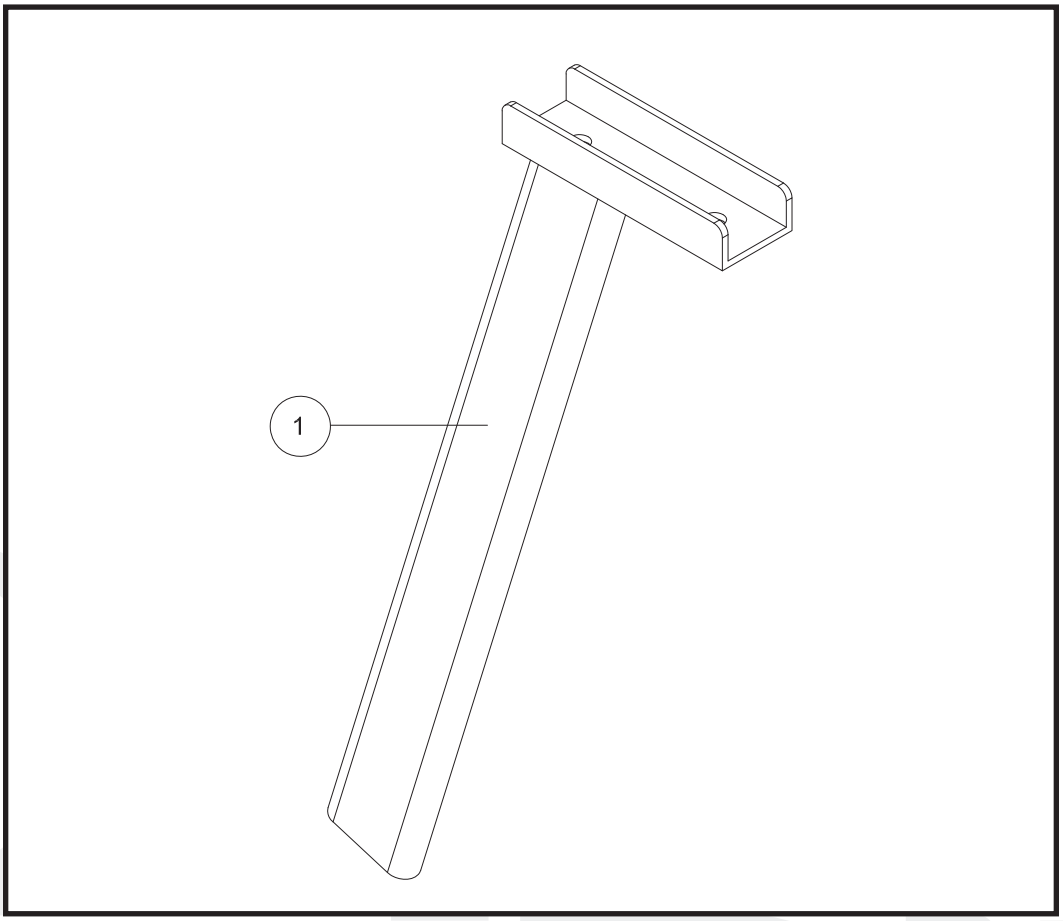


Description	Quantity	Item Number
Top Handle Bar Cover	1	1
Screws M5 x 25mm	4	2
Bottom Handle Bar Cover	1	3
Screws M3 x 14mm	2	4

22-90-123

Seat Post

900Ub

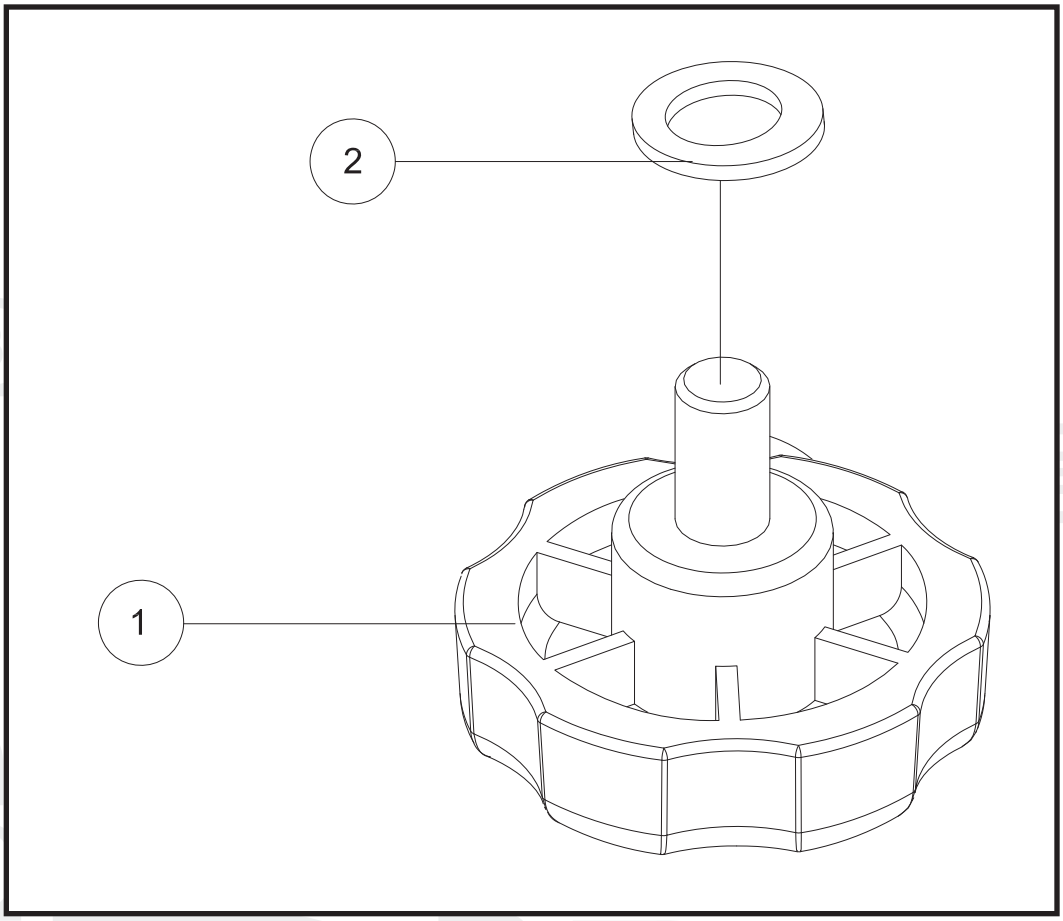


Description	Quantity	Item Number
Seat Post	1	1

22-90-127

Seat Slide Knob

900Ub

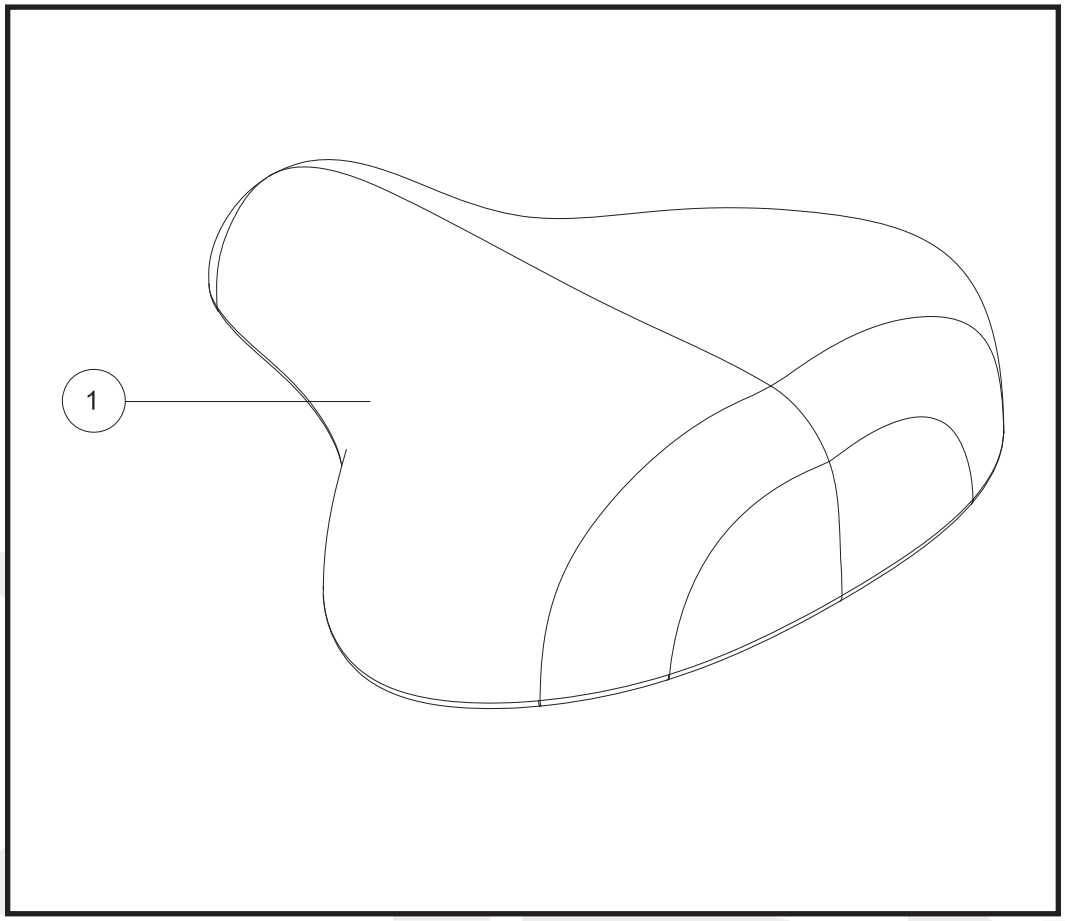


Description	Quantity	Item Number
Knob	1	1
Flat Washer 14.3x25x2t	1	2

22-90-129

Saddle

900Ub

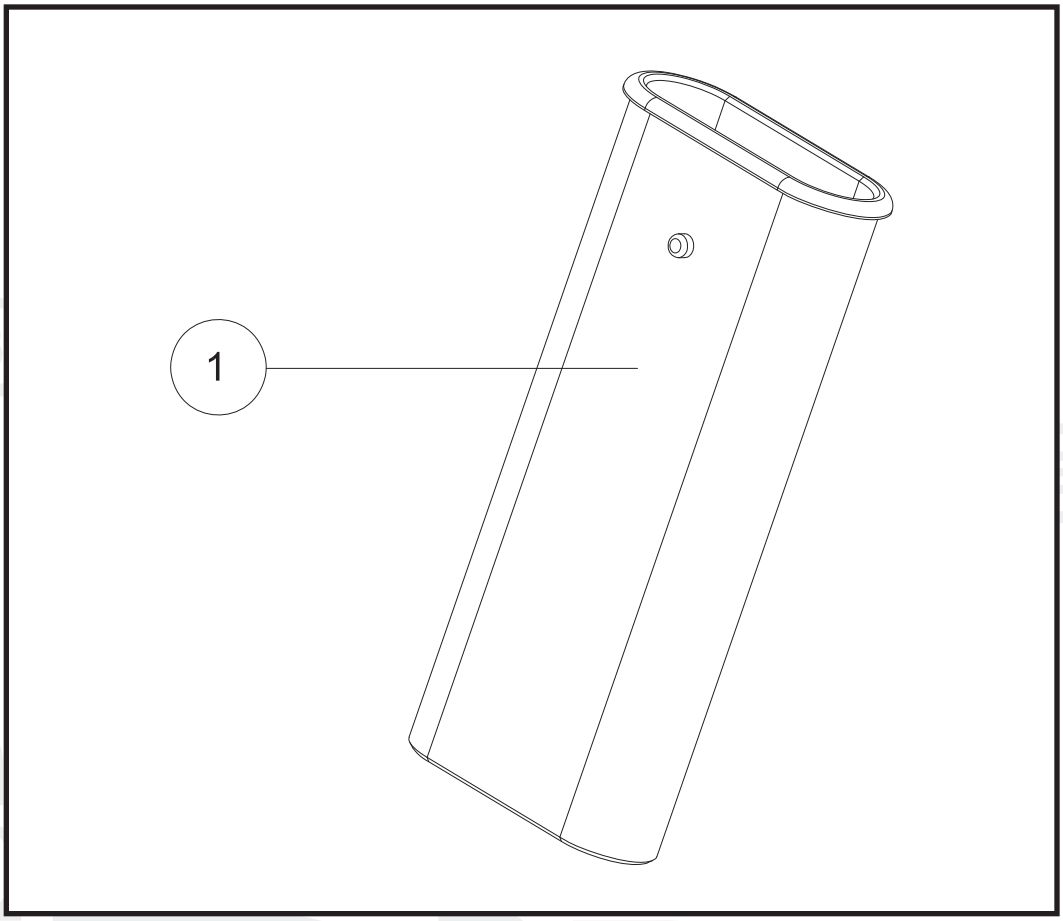


Description	Quantity	Item Number
Saddle	1	1

22-90-131

Seat Post Bushing

900Ub

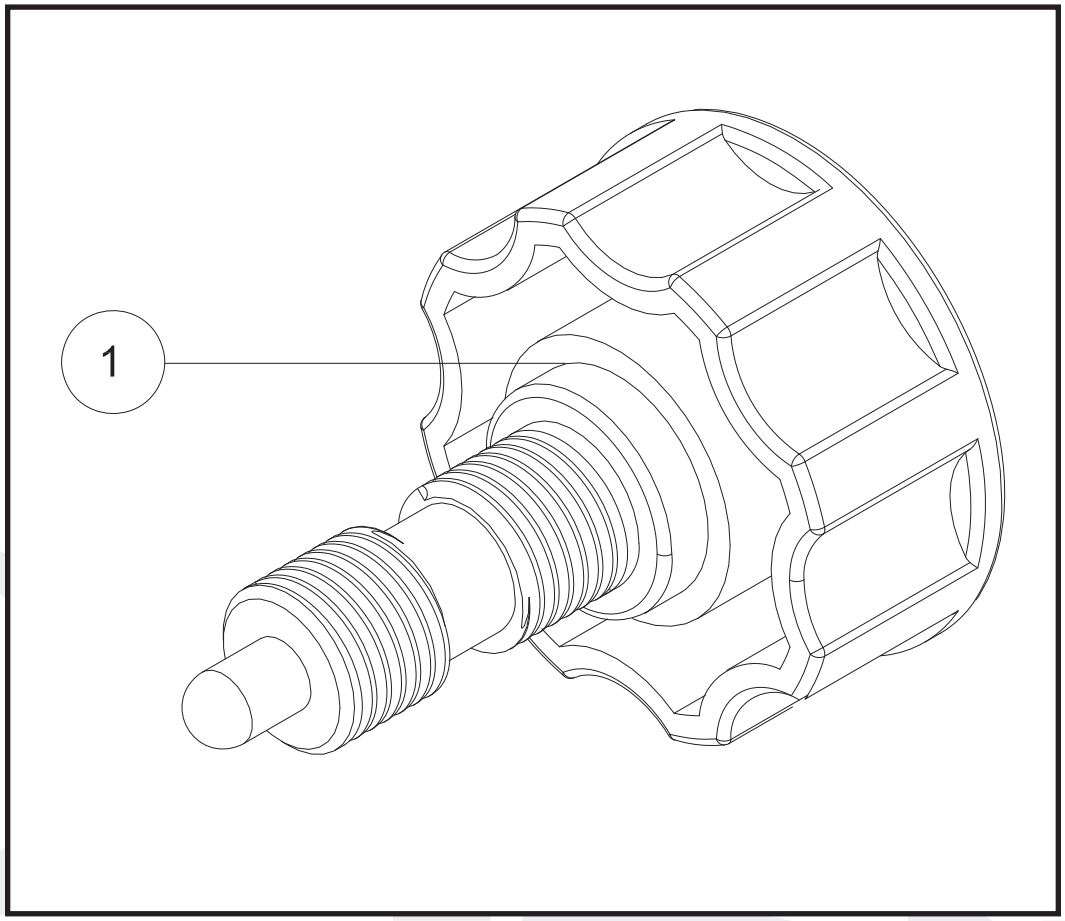


Description	Quantity	Item Number
Seat Post Bushing	1	1

22-90-135

Seat Pin Assembly

900Ub

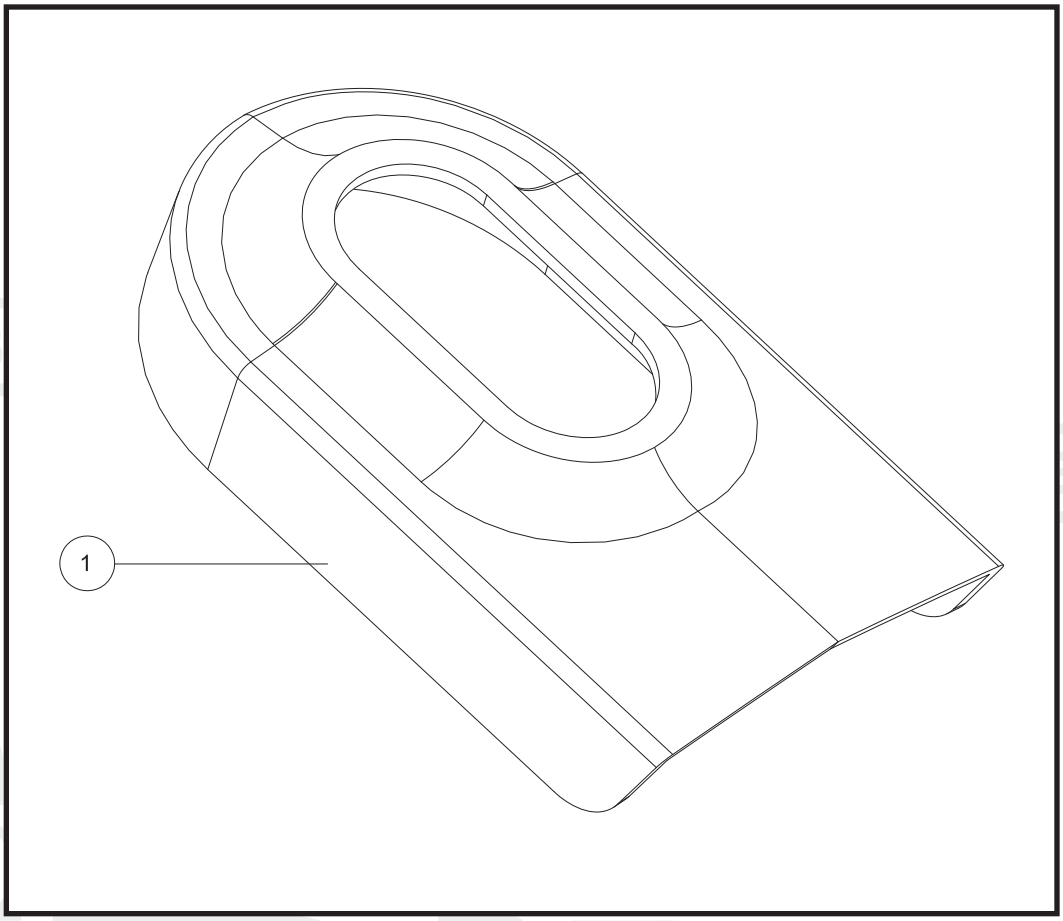


Description	Quantity	Item Number
Seat Pin Assembly	1	1

22-90-137

Console Mast Cover

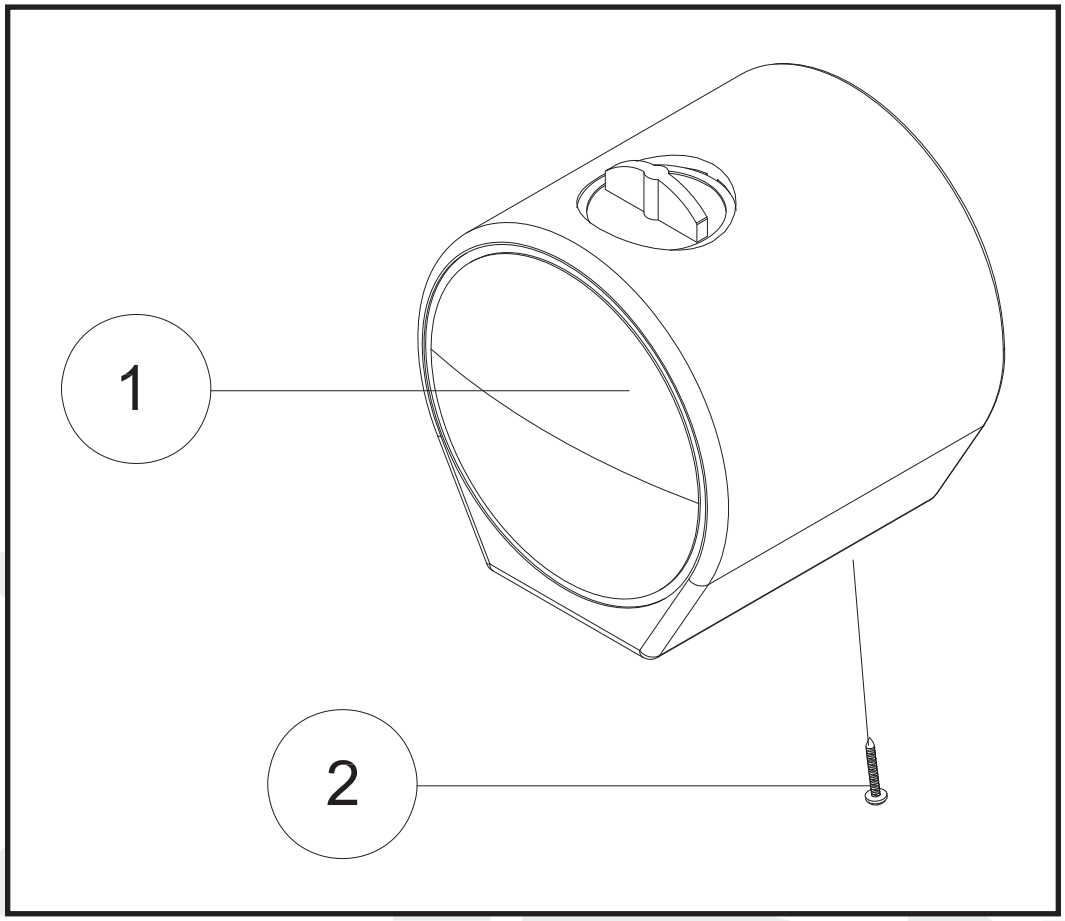
900Ub/900Sr



Description	Quantity	Item Number
Console Mast Cover	1	1

22-90-147

Leveling Caps
900Ub/900Sr

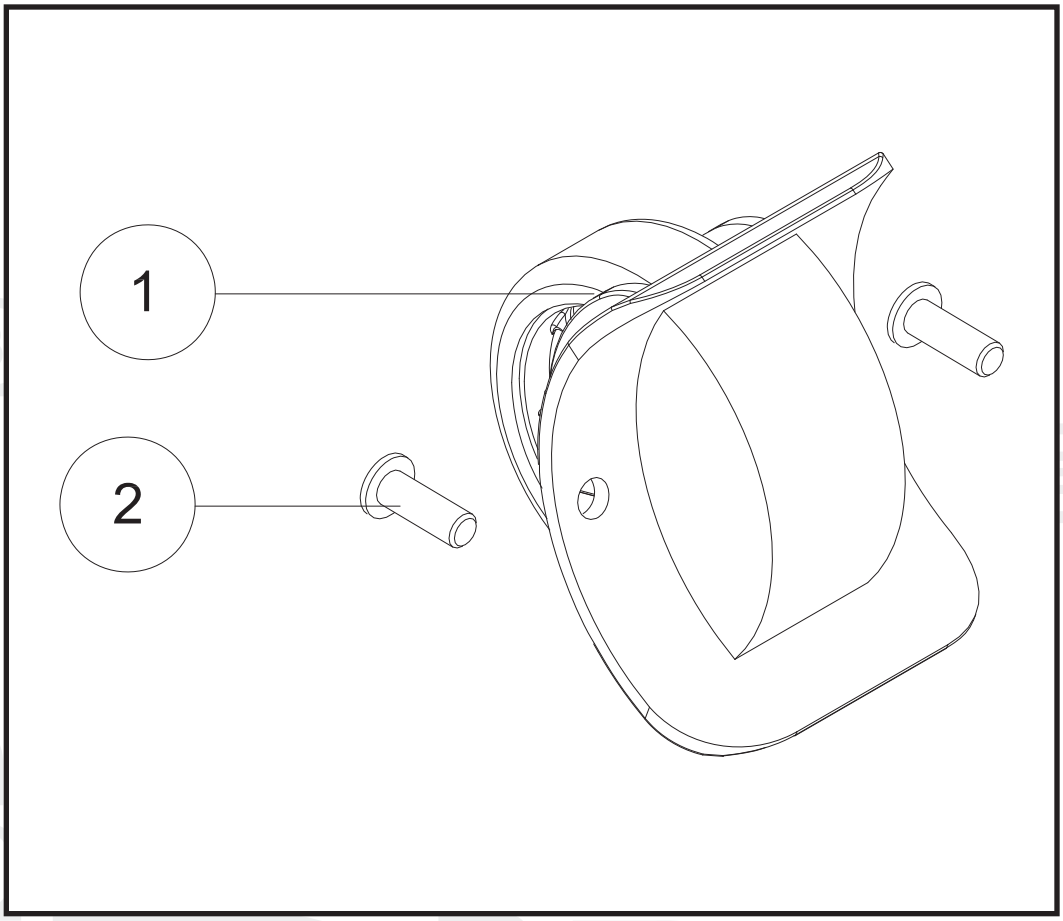


Description	Quantity	Item Number
Leveling Cap	2	1
Screw 3/16"x3/4"	2	2

22-90-149

Transport Wheels

900Ub/900Sr

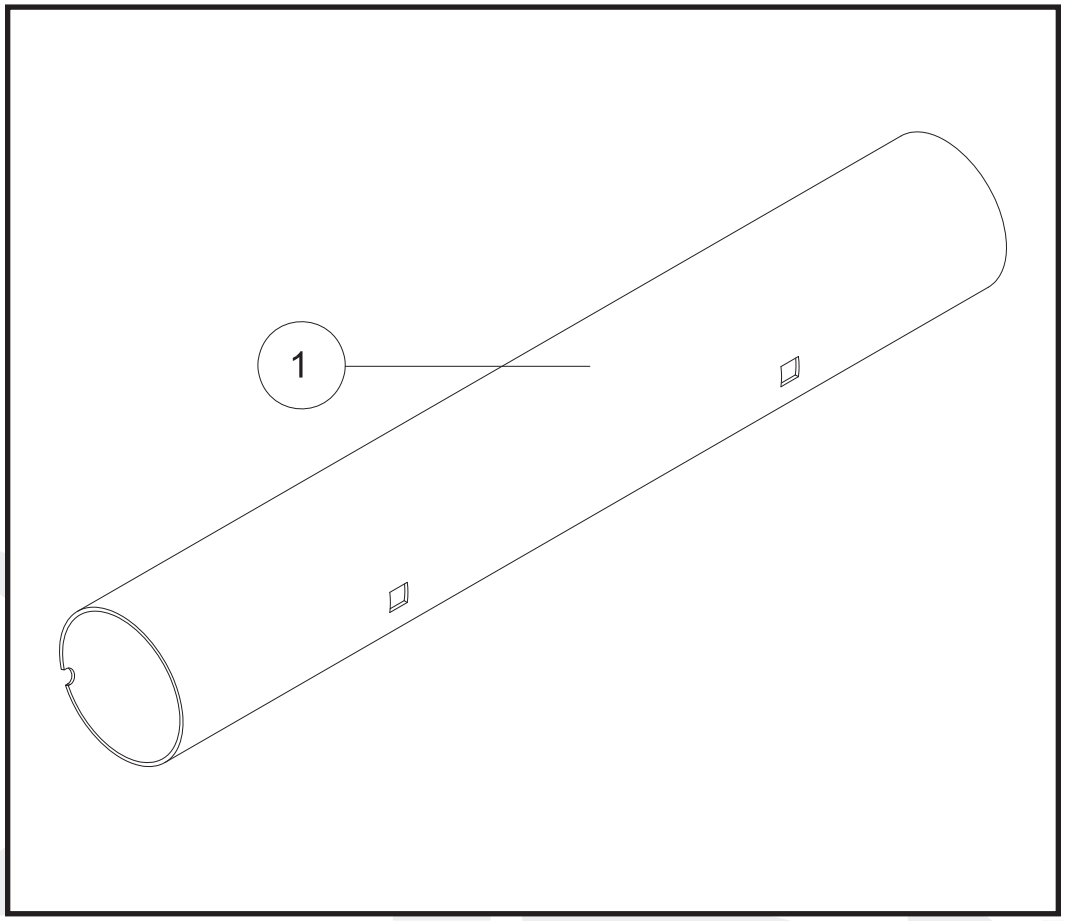


Description	Quantity	Item Number
Transport Wheel	2	1
Screw M5 x 12mm	4	2

22-90-151

Front Stabilizer

900Ub

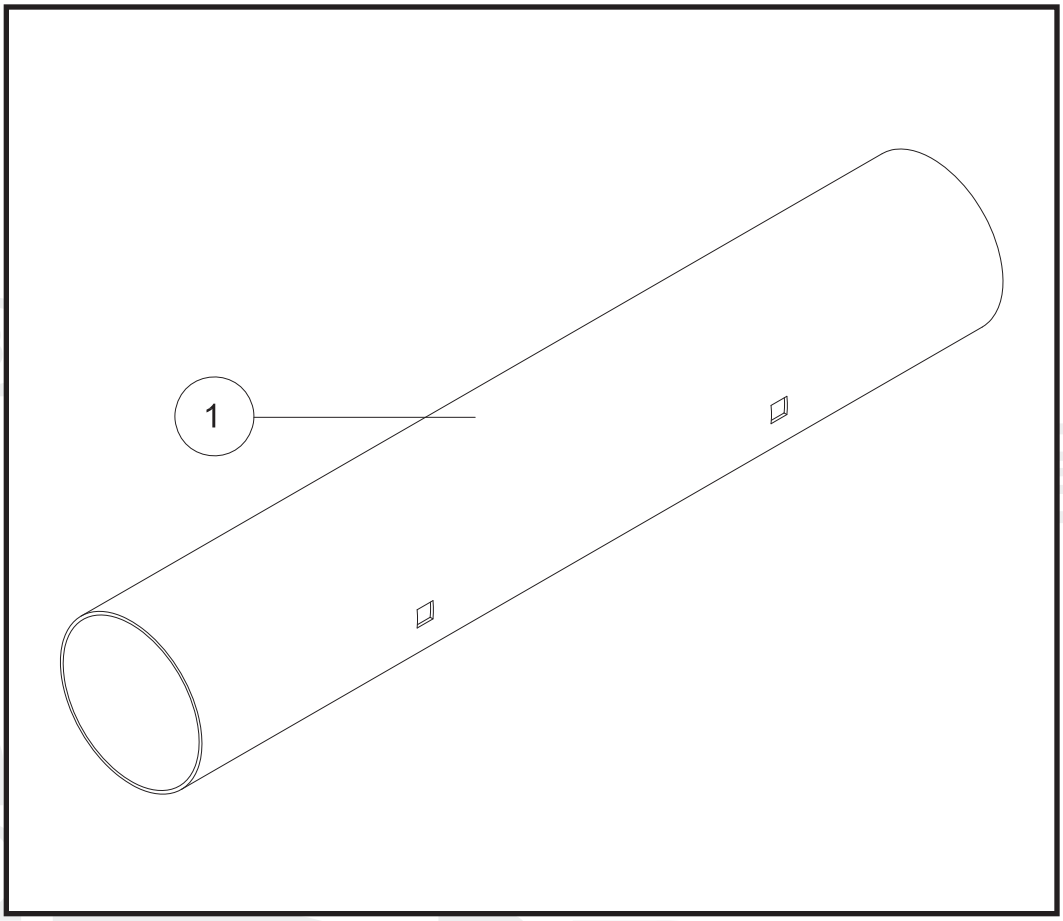


Description	Quantity	Item Number
Front Stabilizer	1	1

22-90-153

Rear Stabilizer

900Ub

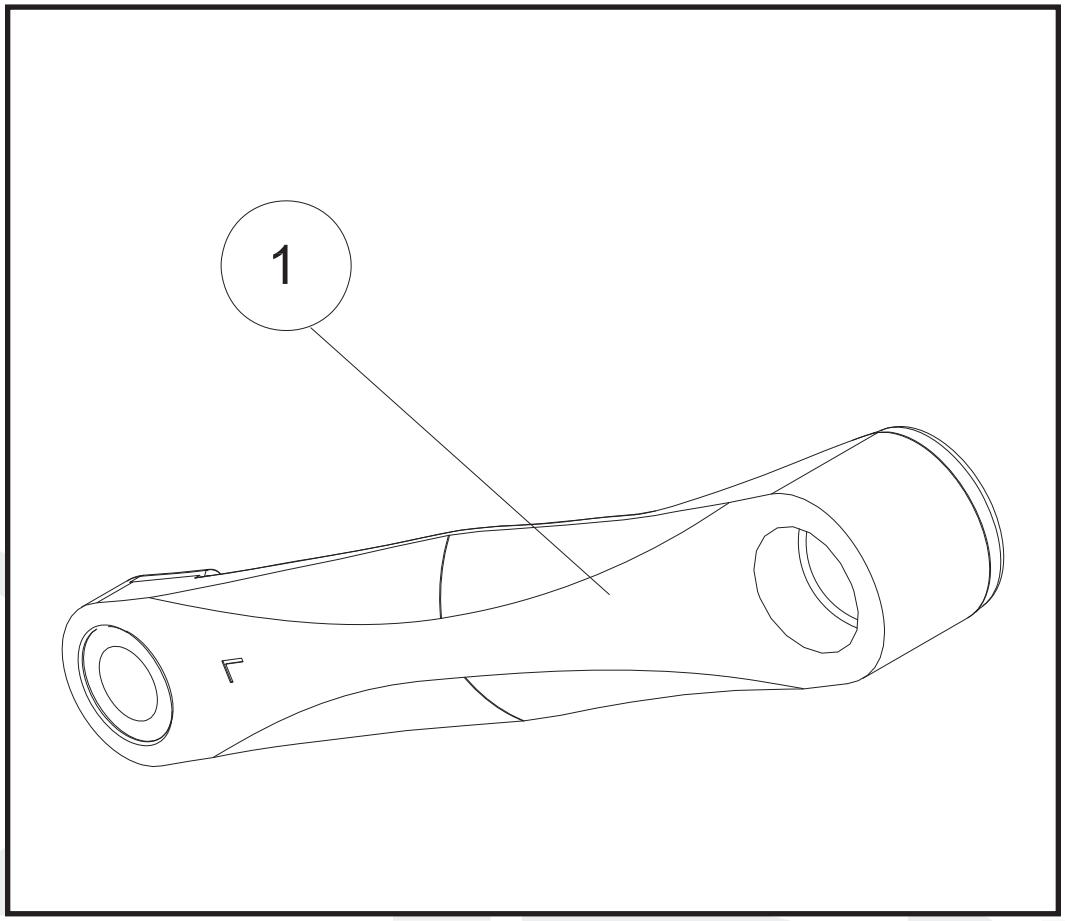


Description	Quantity	Item Number
Rear Stabilizer	1	1

22-90-157

Left Crank Arm

900Ub/900Sr

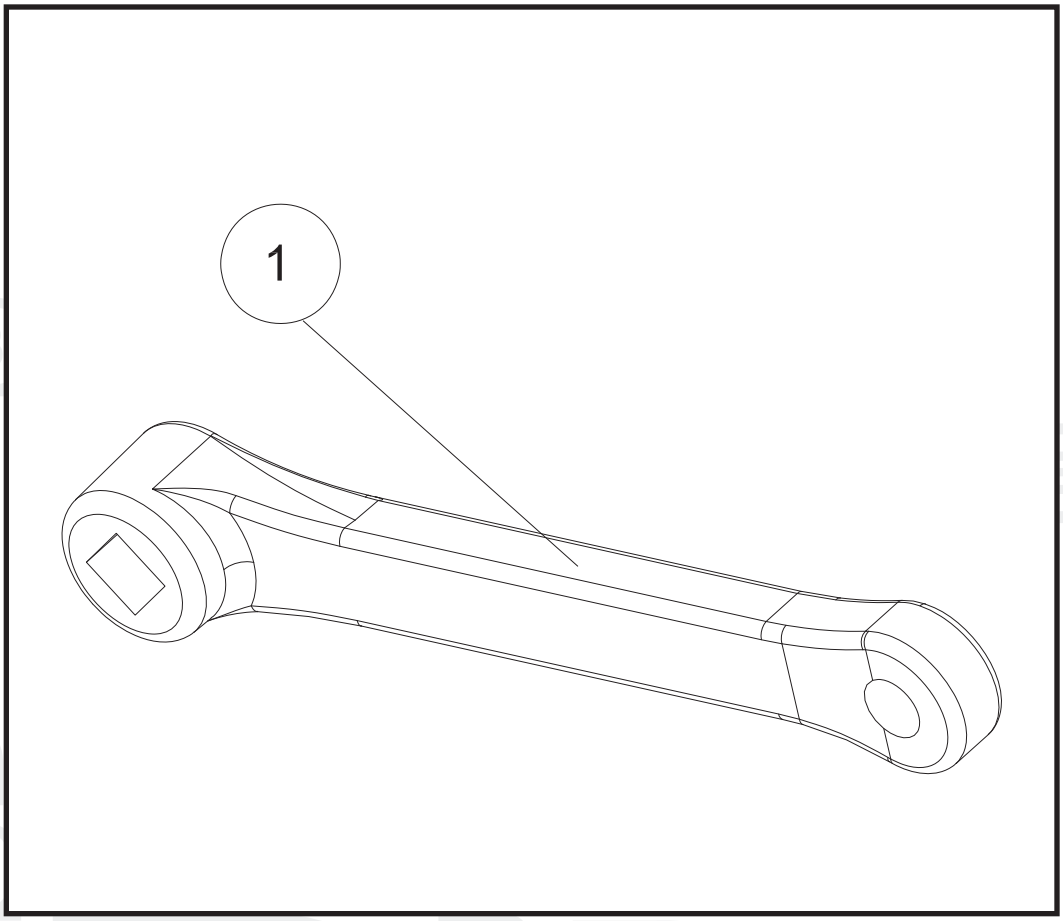


Description	Quantity	Item Number
Left Crank Arm 9/16"	1	1

22-90-159

Right Crank Arm

900Ub/900Sr

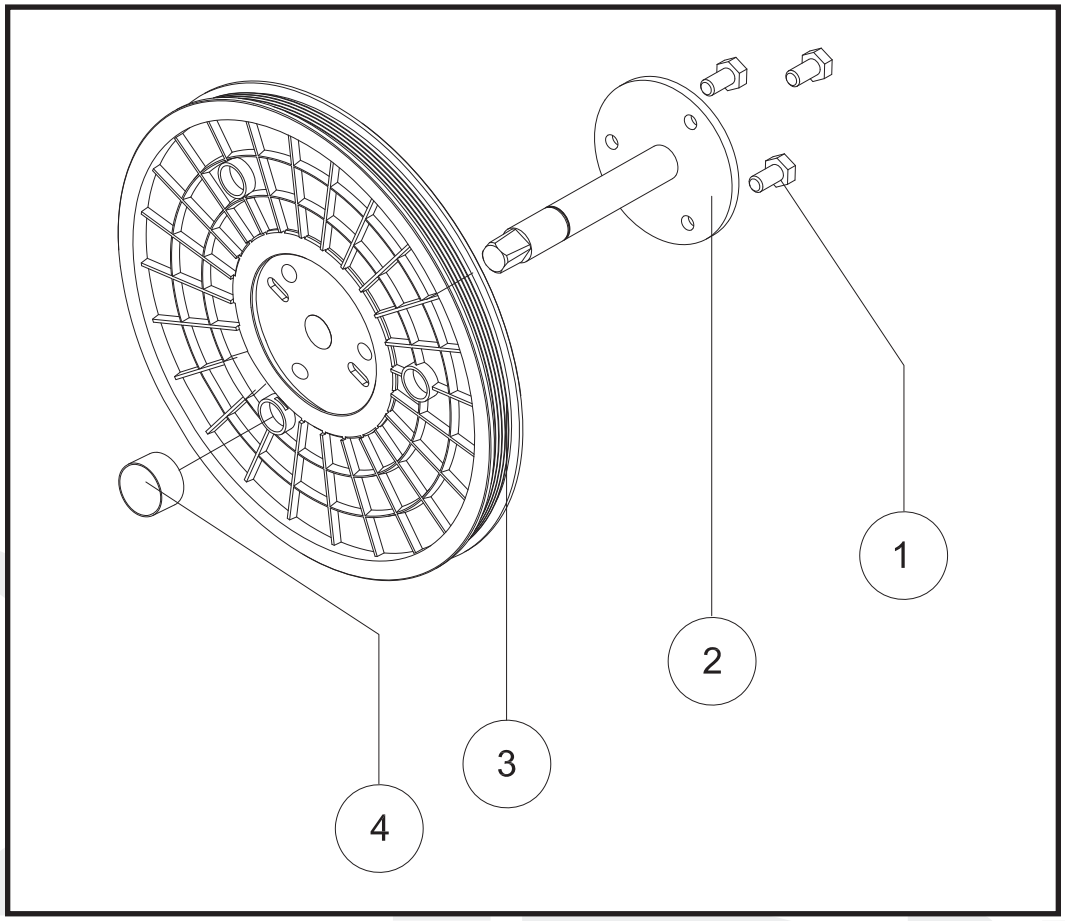


Description	Quantity	Item Number
Right Crank Arm 9/16"	1	1

22-90-167

Drive Pulley (Assemble)

900Ub

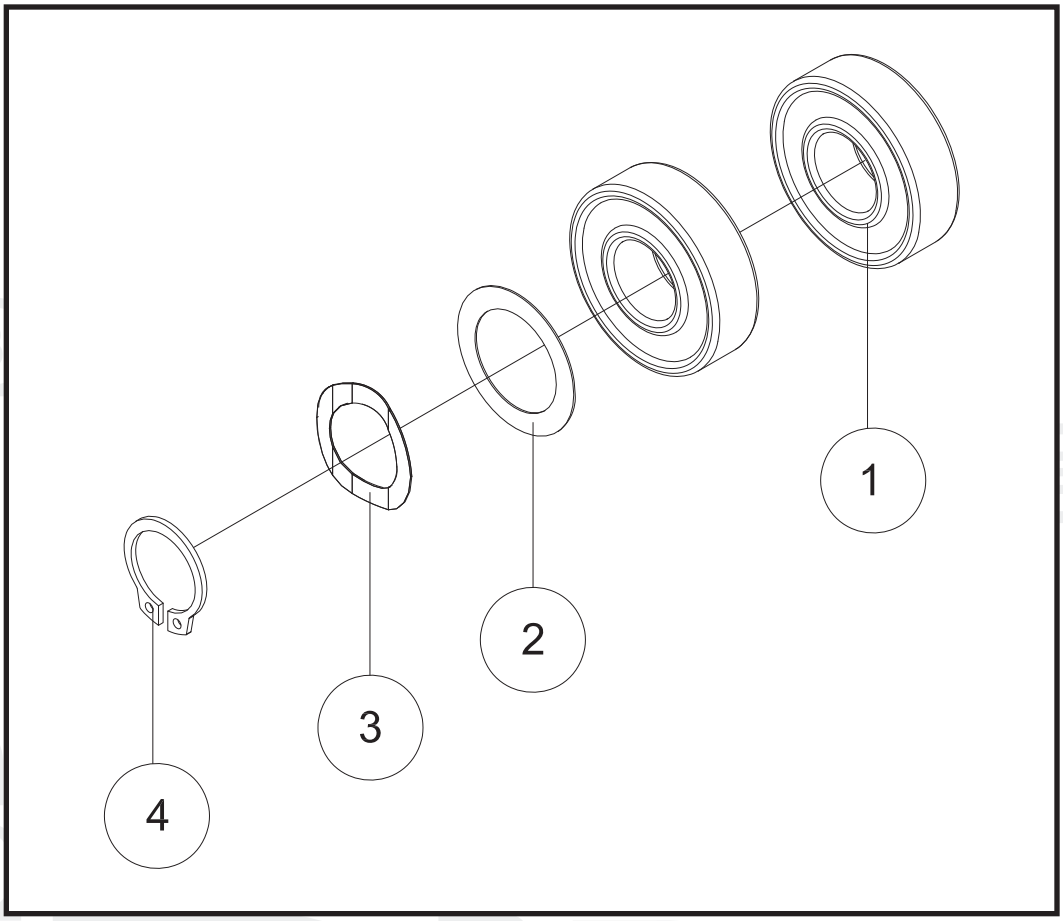


Description	Quantity	Item Number
Bolt M8 x 12mm	3	1
Axle	1	2
Drive Pulley	1	3
Permanent Magnet	1	4

22-90-171

BB Bearing Kit

900Ub

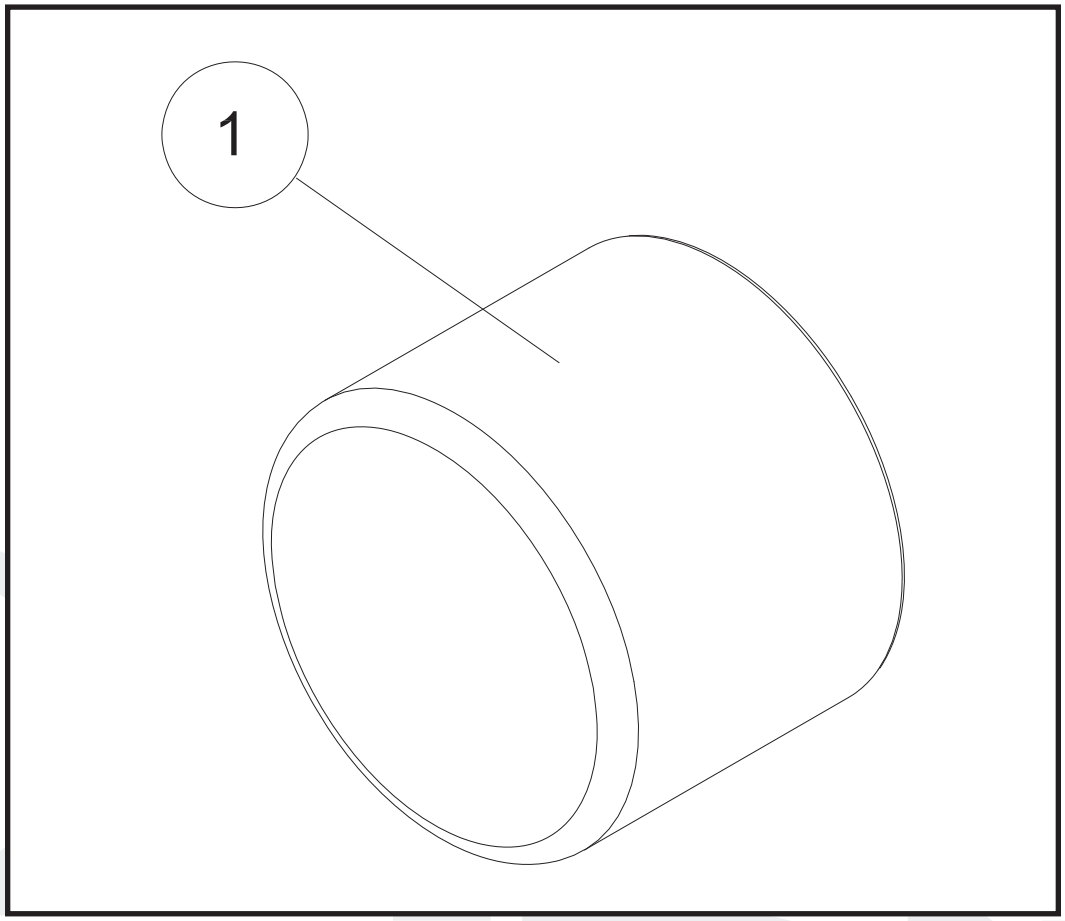


Description	Quantity	Item Number
Bearing 6004RS	2	1
Flat Washer	1	2
Wavy Washer	1	3
C Clip	1	4

22-90-173

Front Stabilizer Endcaps

900Ub

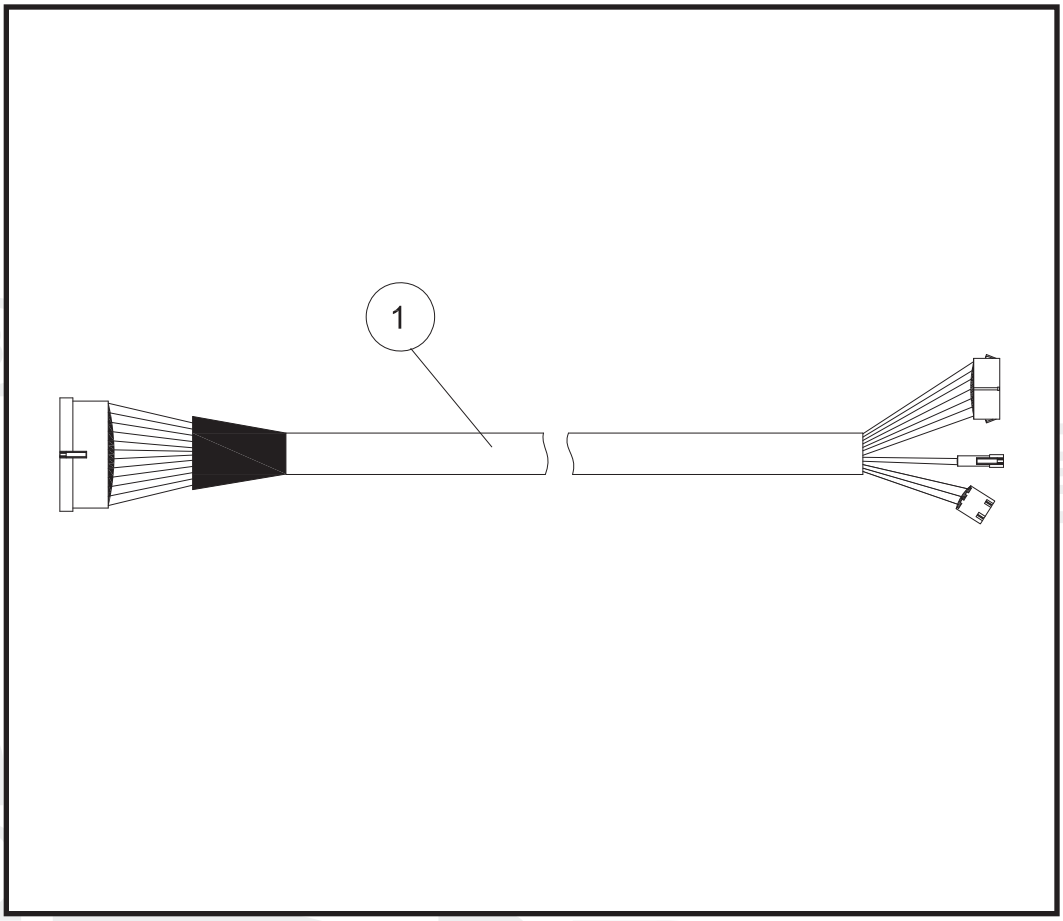


Description	Quantity	Item Number
Front Stabilizer Endcap	2	1

22-50-220

Main Wire Harness - Frame

900Ub

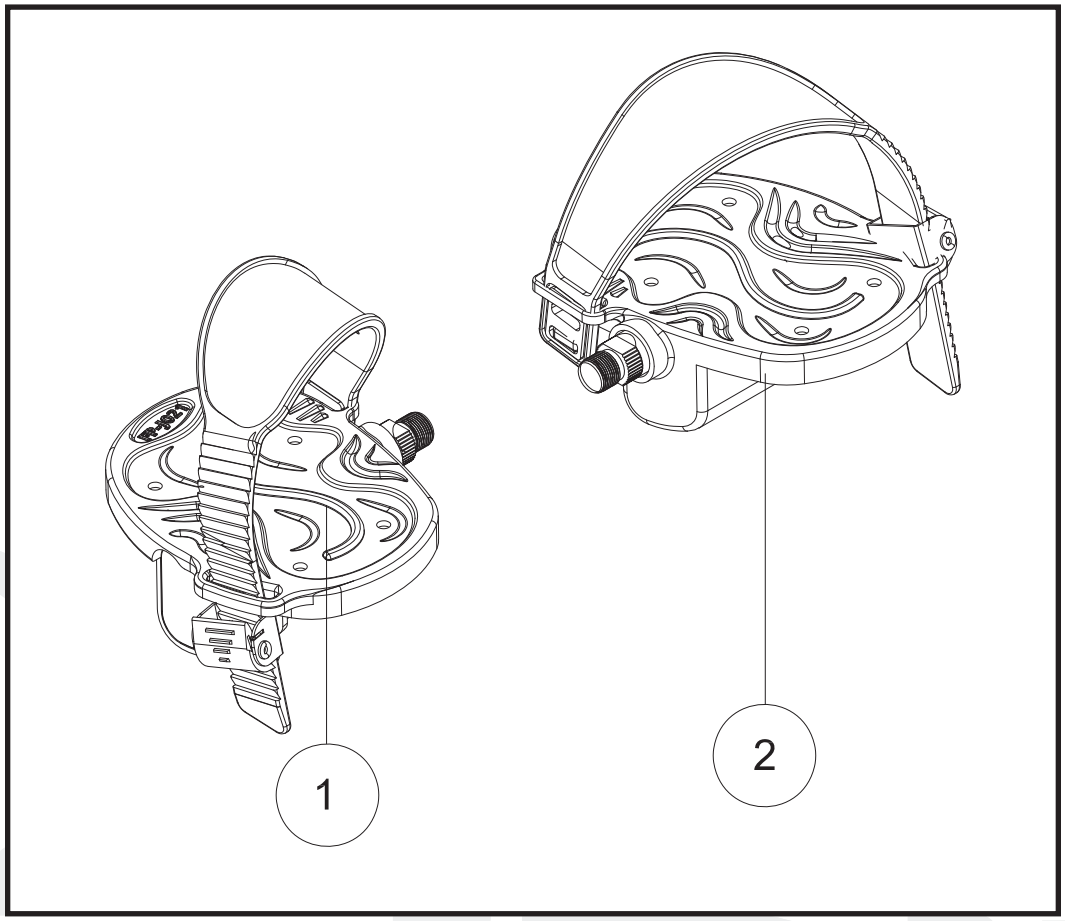


Description	Quantity	Item Number
Main Wire Harness - Frame	1	1

22-90-281

Pedals & Straps (PR)

900Ub/900Sr



Description	Quantity	Item Number
Left Pedal & Strap	1	1
Right Pedal & Strap	1	2

900Sr Parts List

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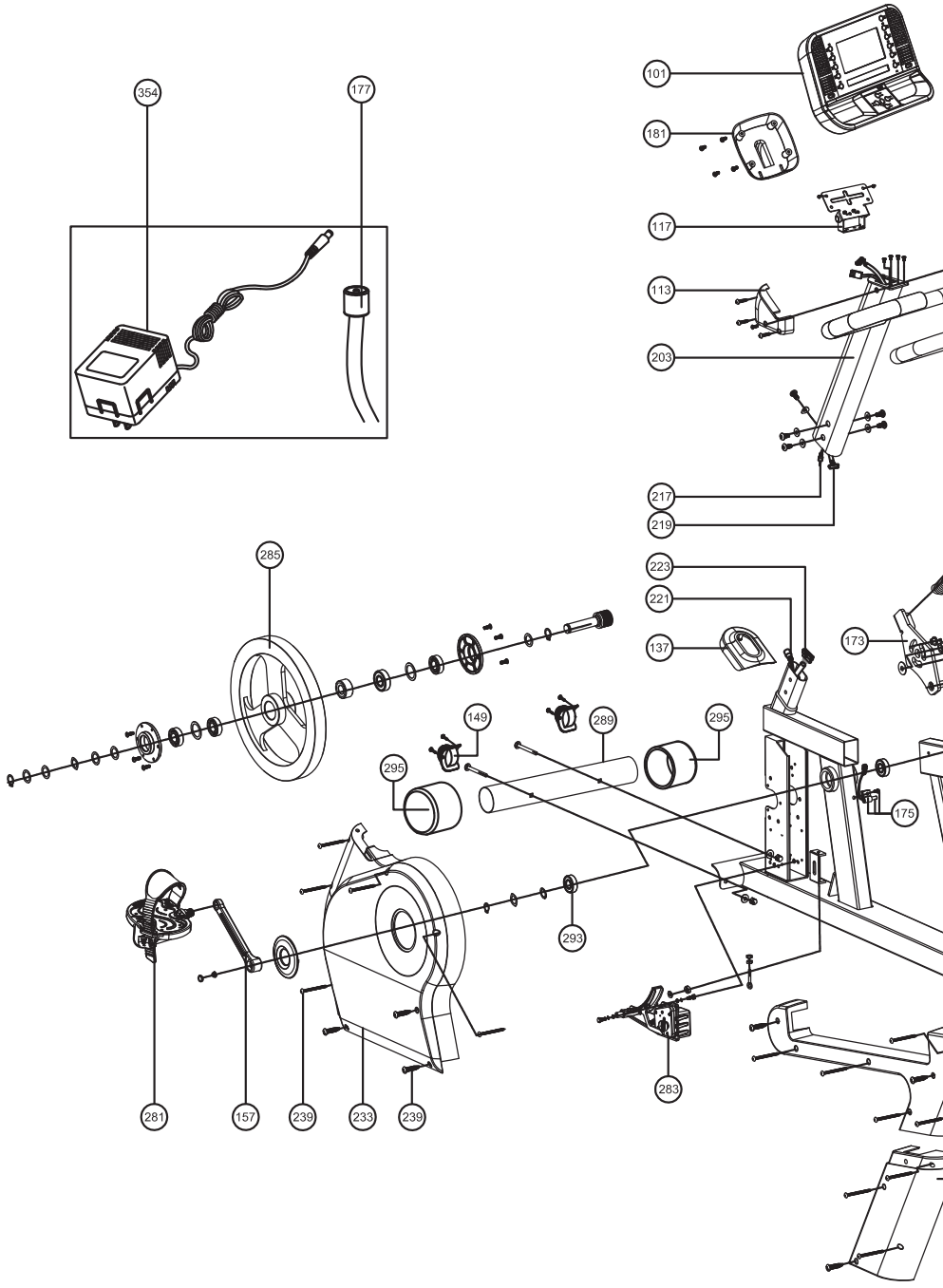
900Sr Explo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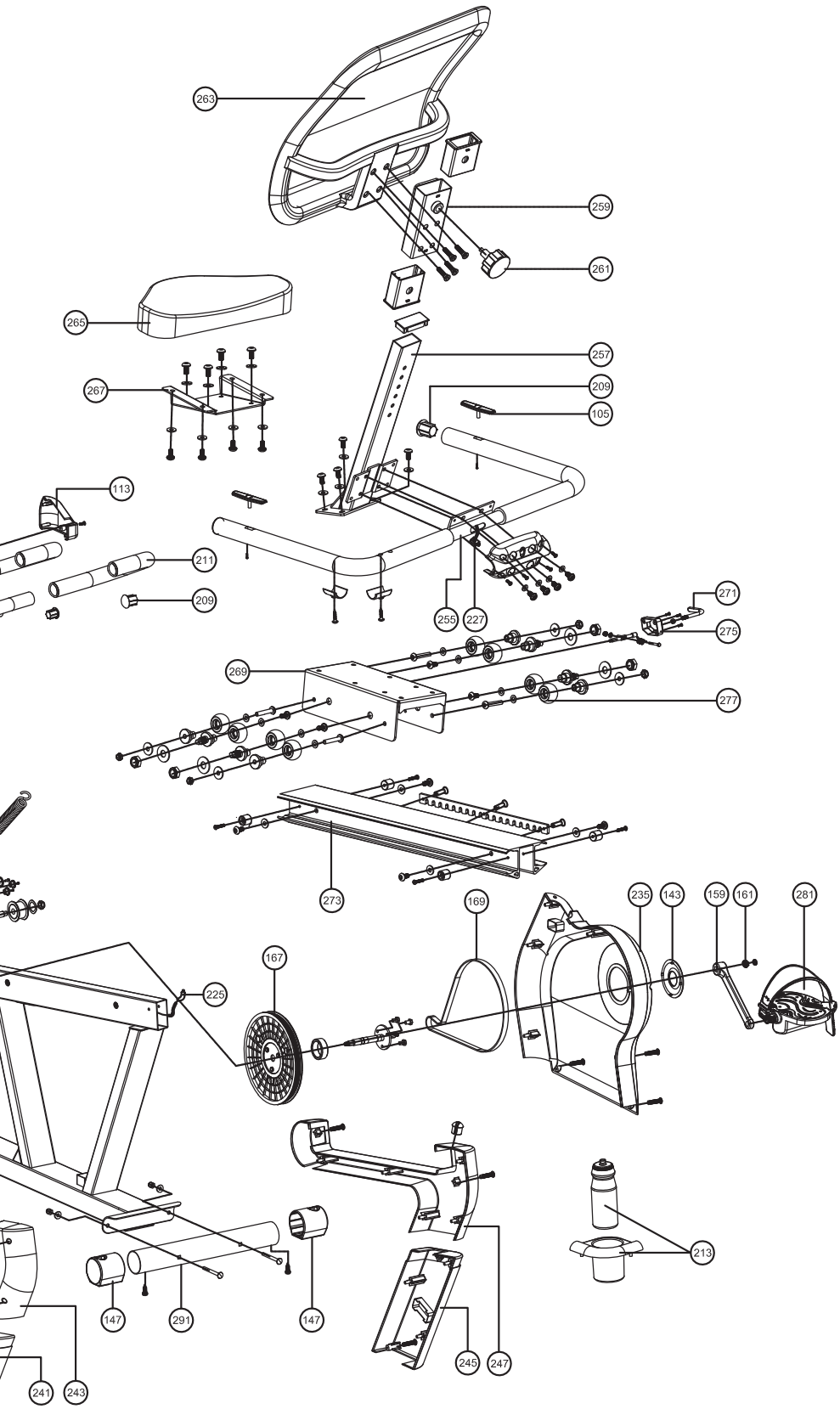
ded Drawing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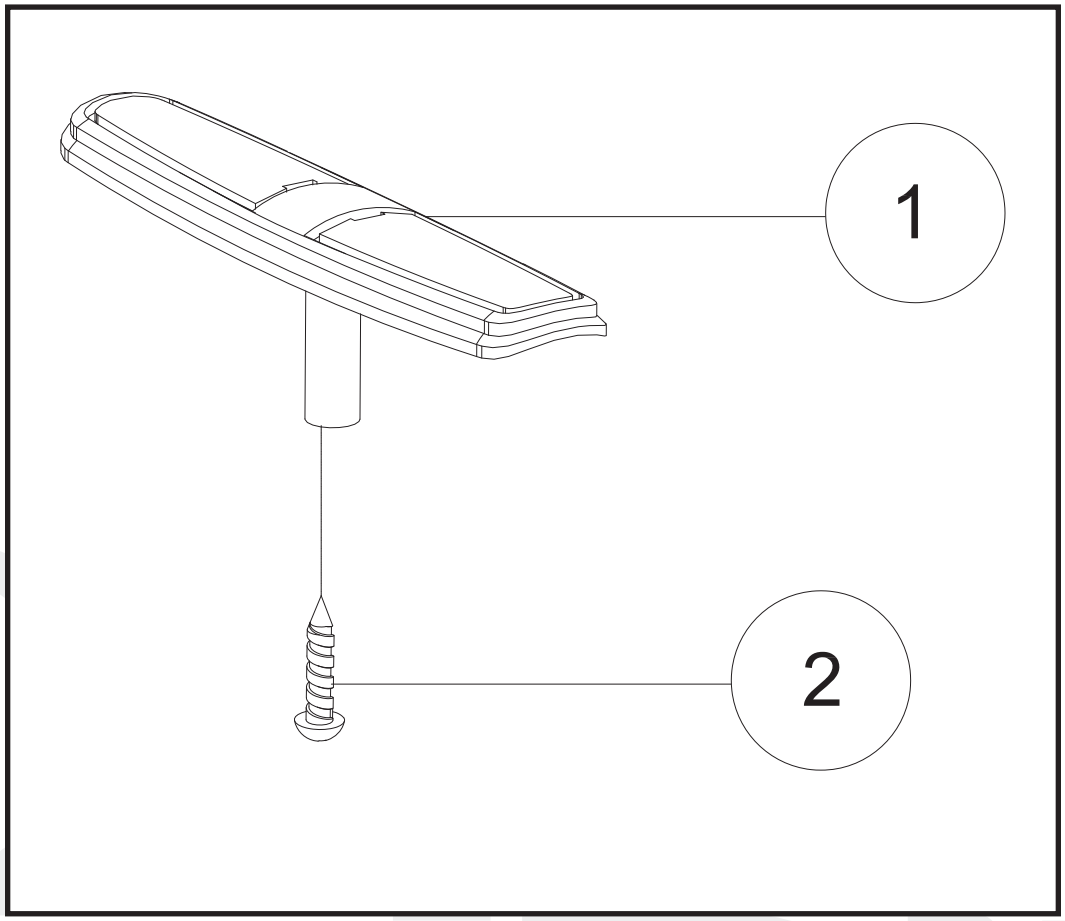
22-90-105

HP Sensors

900Sr

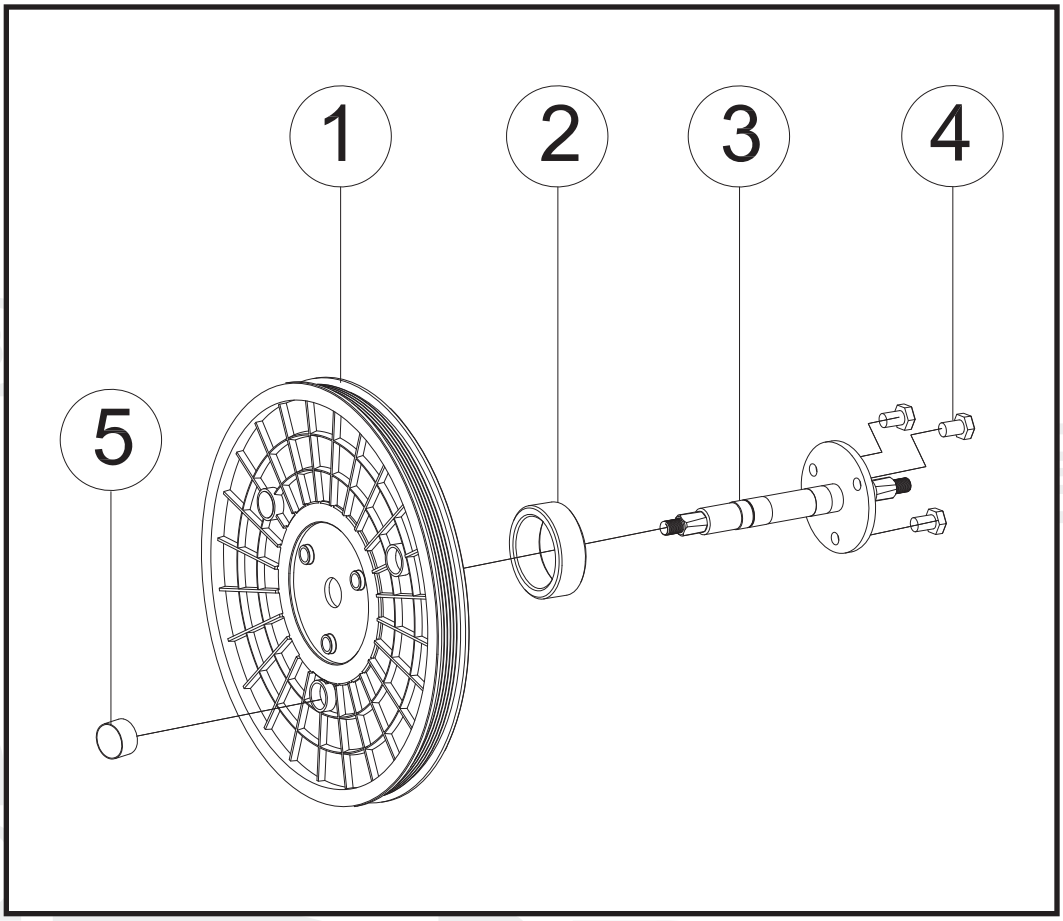


Description	Quantity	Item Number
Sensor	2	1
Screw M3 x 20	2	2

22-90-168

Drive Pulley (Assemble)

900Sr

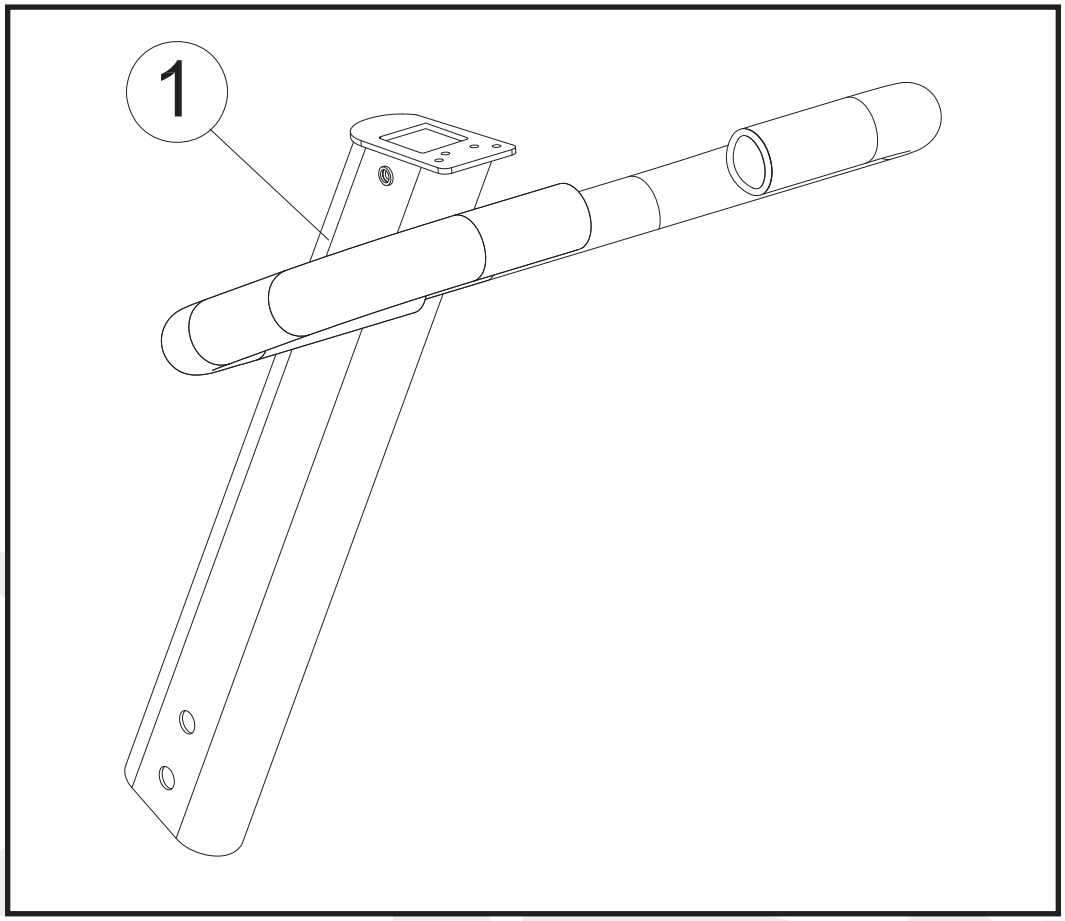


Description	Quantity	Item Number
Drive Pulley	1	
Spacer	1	
Axle	1	
Bolt M8 x 12mm	3	
Permanent Magnet	1	

22-90-203

Console Mast

900Sr

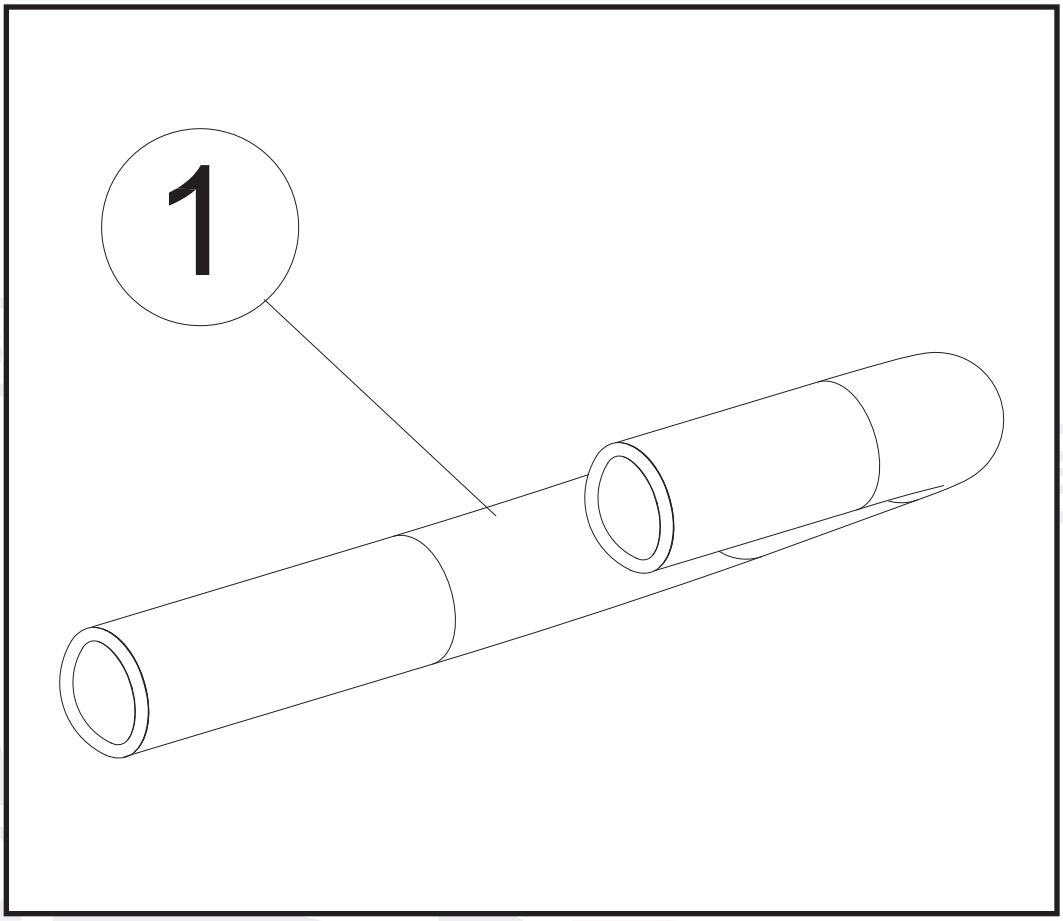


Description	Quantity	Item Number
Console Mast w/ Foam Grips & Endcaps	1	1

22-90-211

Foam Grips

900Sr

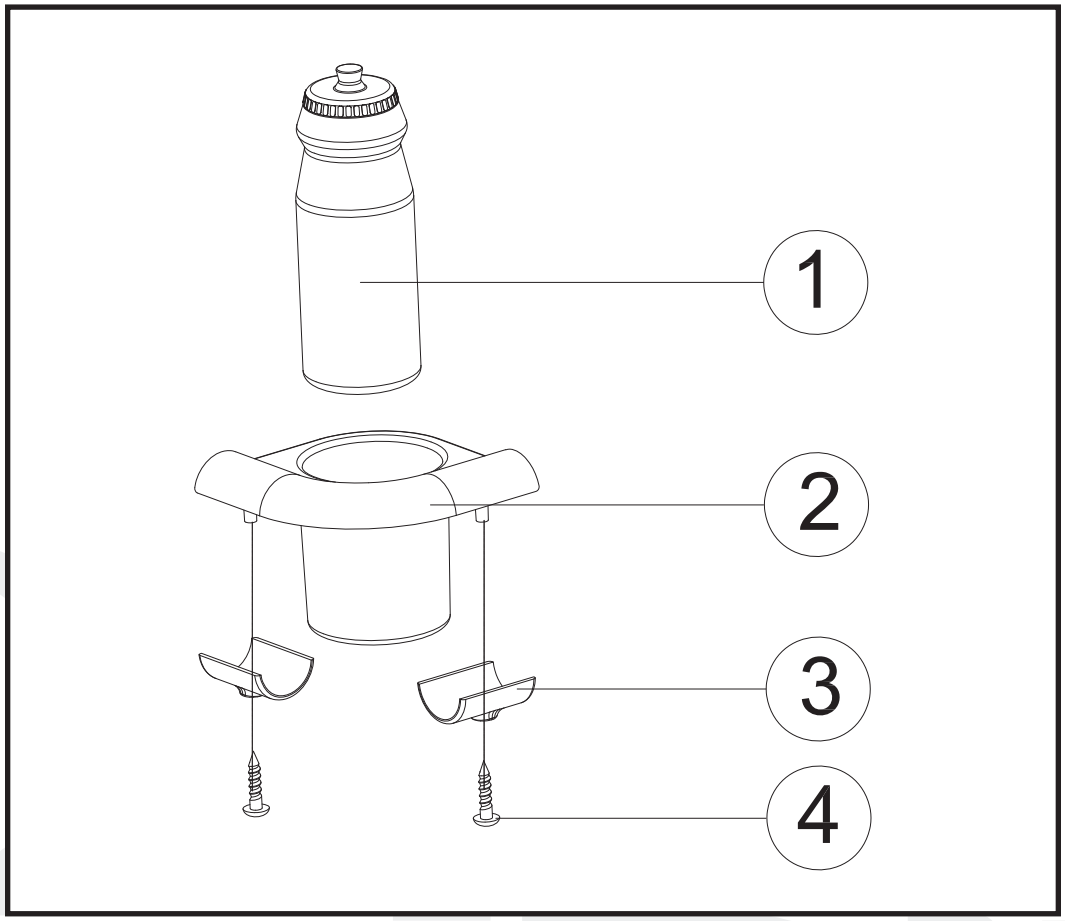


Description	Quantity	Item Number
Foam Grip	2	1

22-90-213

Water Bottle Set

900Sr

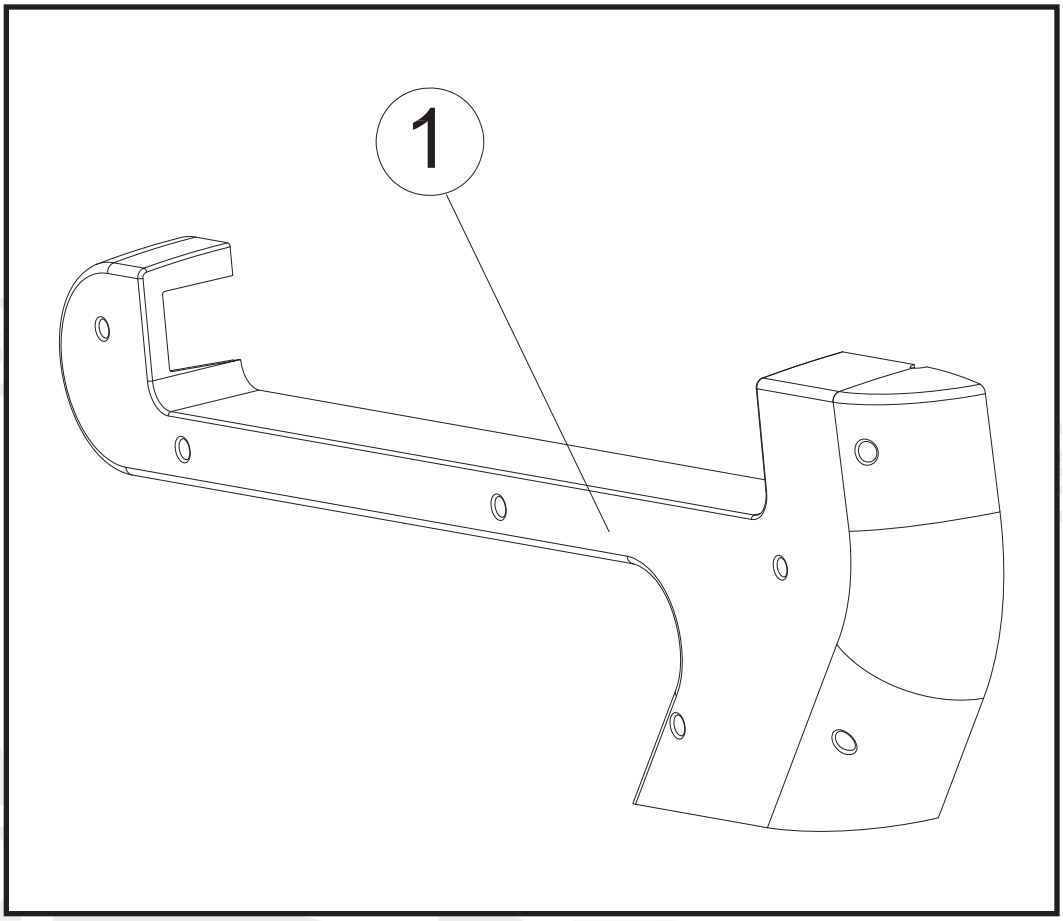


Description	Quantity	Item Number
Bottle	1	1
Bottle Holder	1	2
Clip	2	3
Screw M4 x 20	2	4

22-90-243

Rear Left Upper Sidecase

900Sr

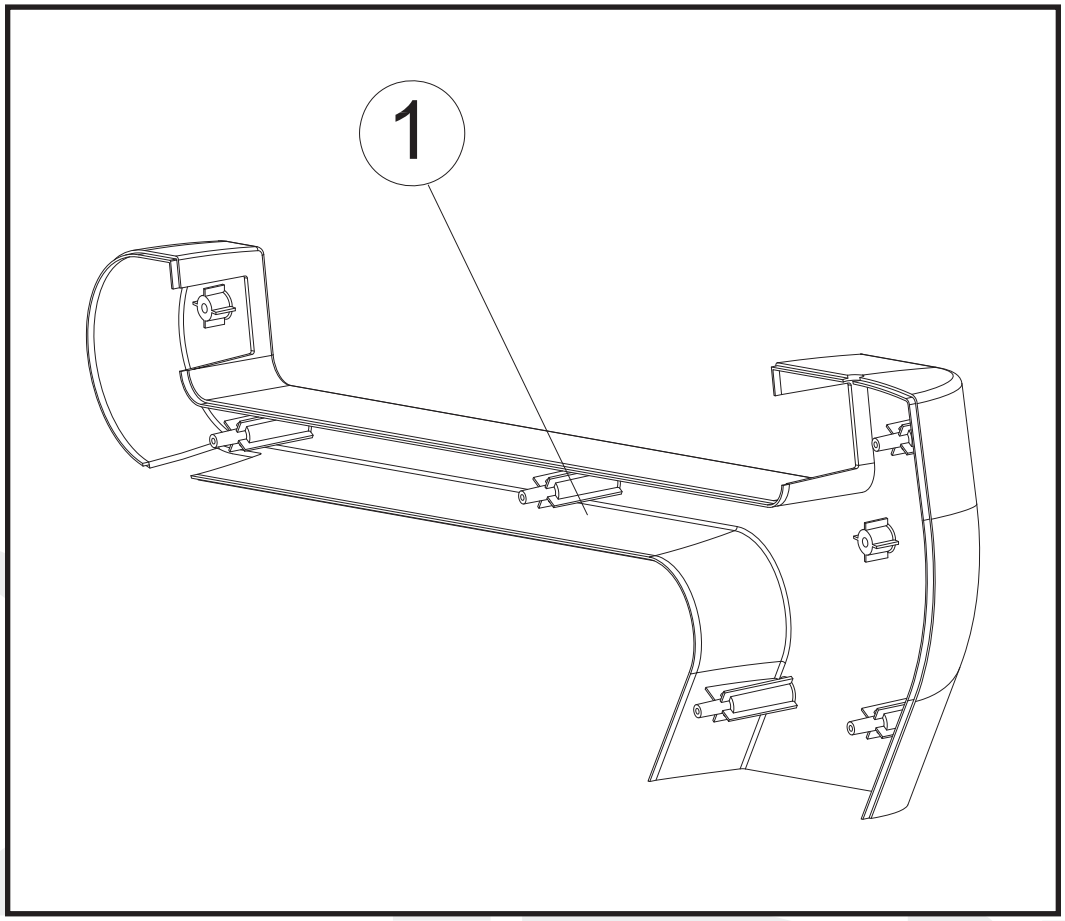


Description	Quantity	Item Number
Rear Left Upper Sidecase	1	1

22-90-247

Rear Right Upper Sidecase

900Sr

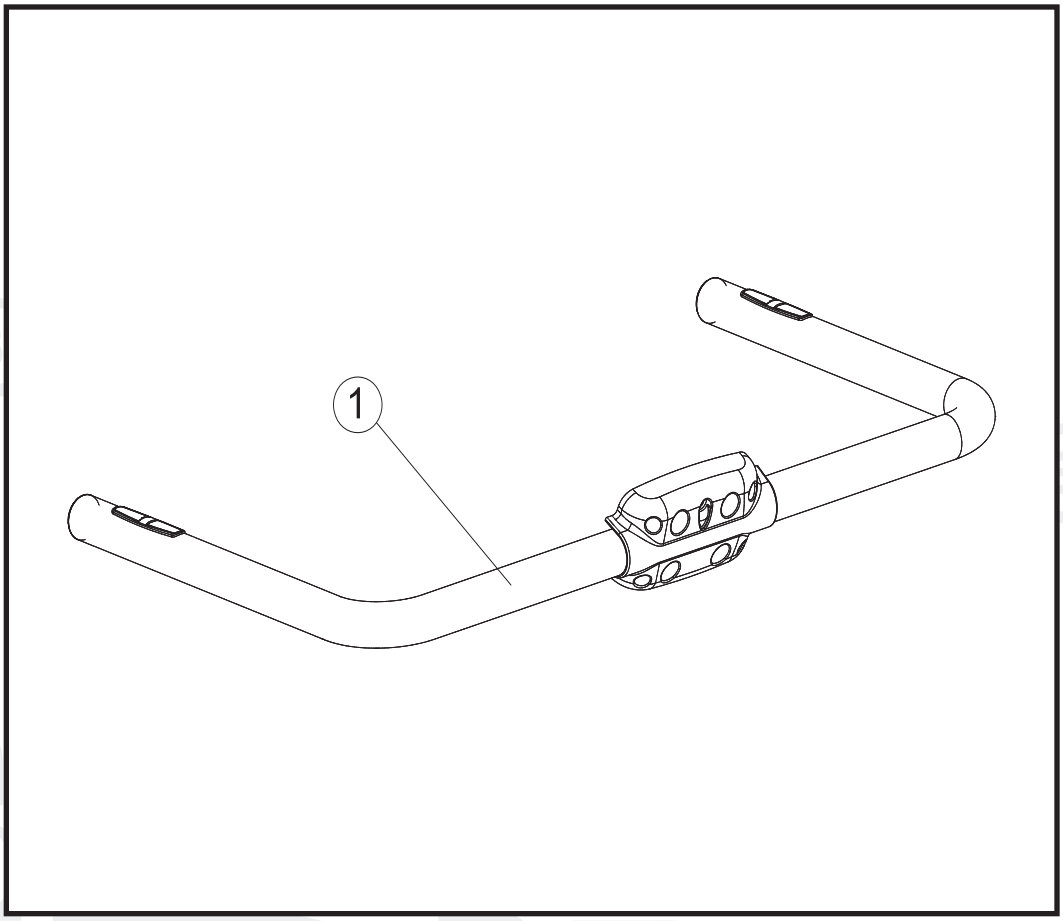


Description	Quantity	Item Number
Rear Right Upper Sidecase	1	1

22-90-255

Rear Handle Bar

900Sr

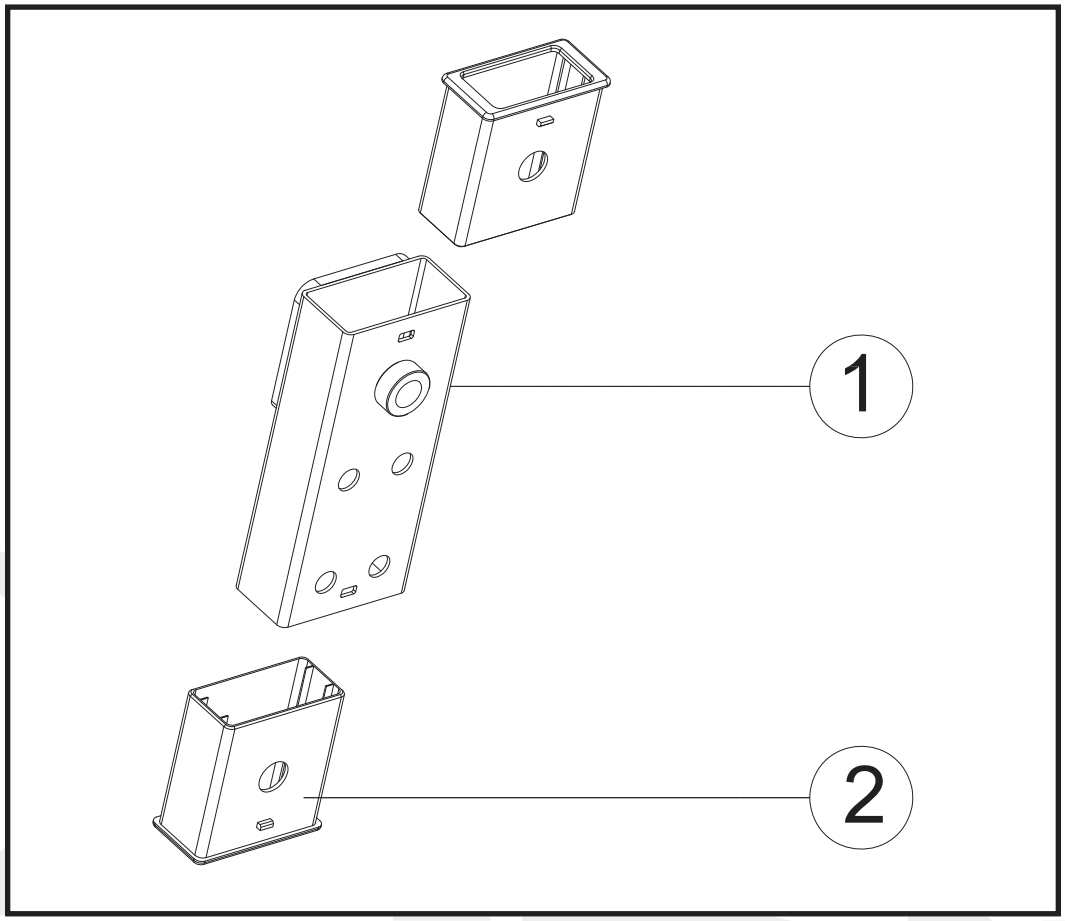


Description	Quantity	Item Number
Rear Handle Bar Assembly	1	1

22-90-259

Seat Back Mount Bracket

900Sr

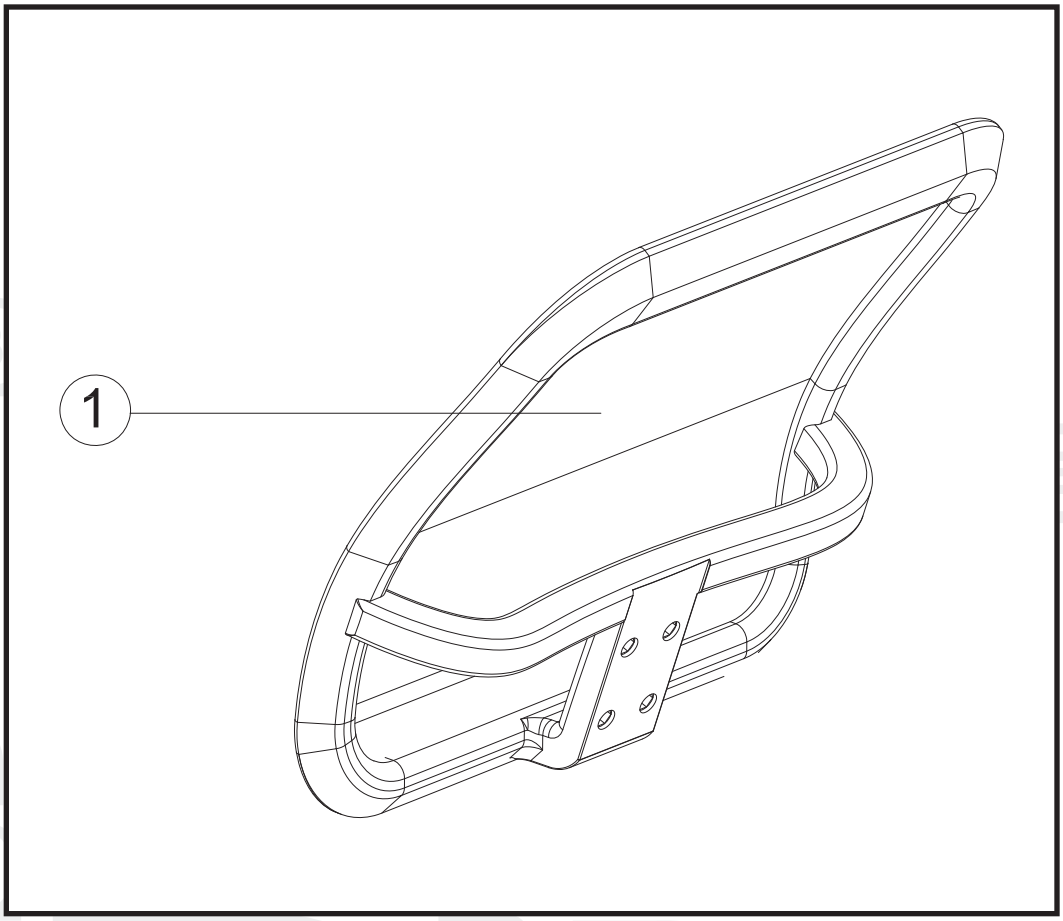


Description	Quantity	Item Number
Seat Back Mount Bracket	1	1
Bushing	2	2

22-90-263

Mesh Seat Bac

900Sr

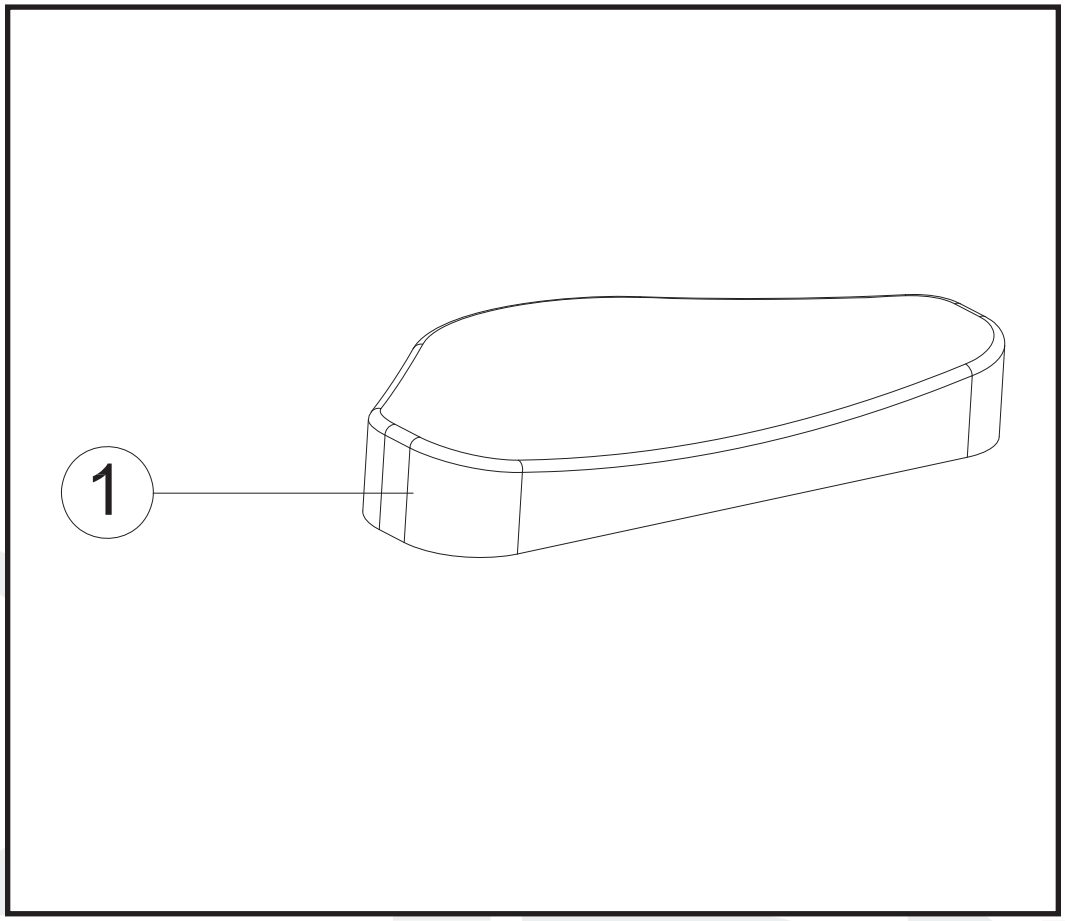


Description	Quantity	Item Number
Mesh Seat Back	1	1

22-90-265

Seat Pad

900Sr

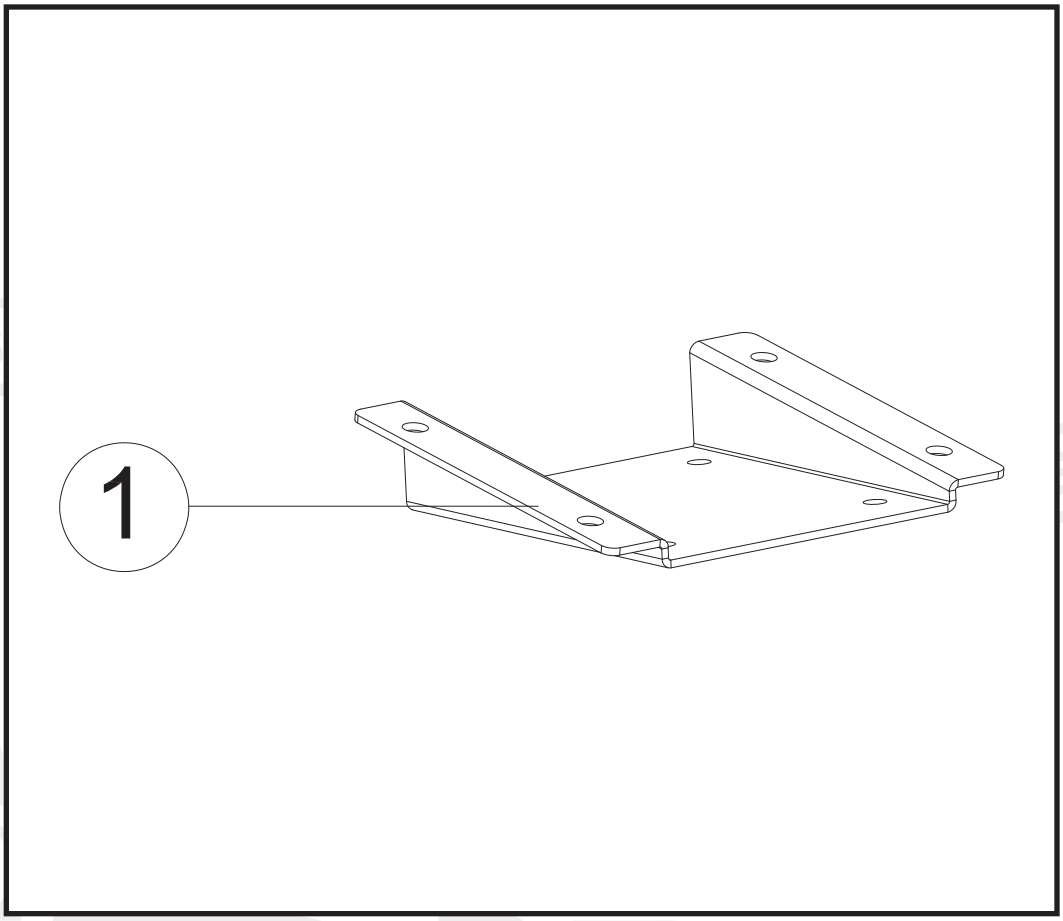


Description	Quantity	Item Number
Seat Pad	1	1

22-90-267

Seat Mount Bracket

900Sr

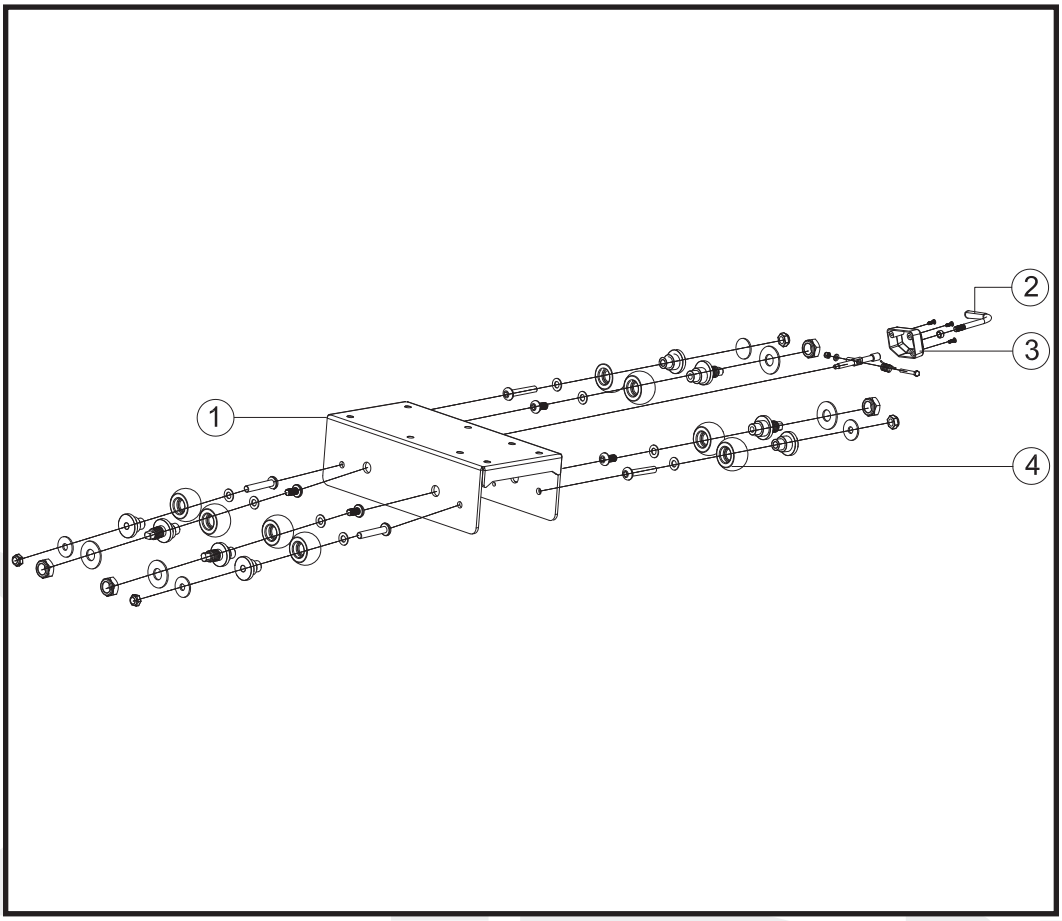


Description	Quantity	Item Number
seat Mount Bracket	1	1

22-90-269

Seat Slide Frame

900Sr

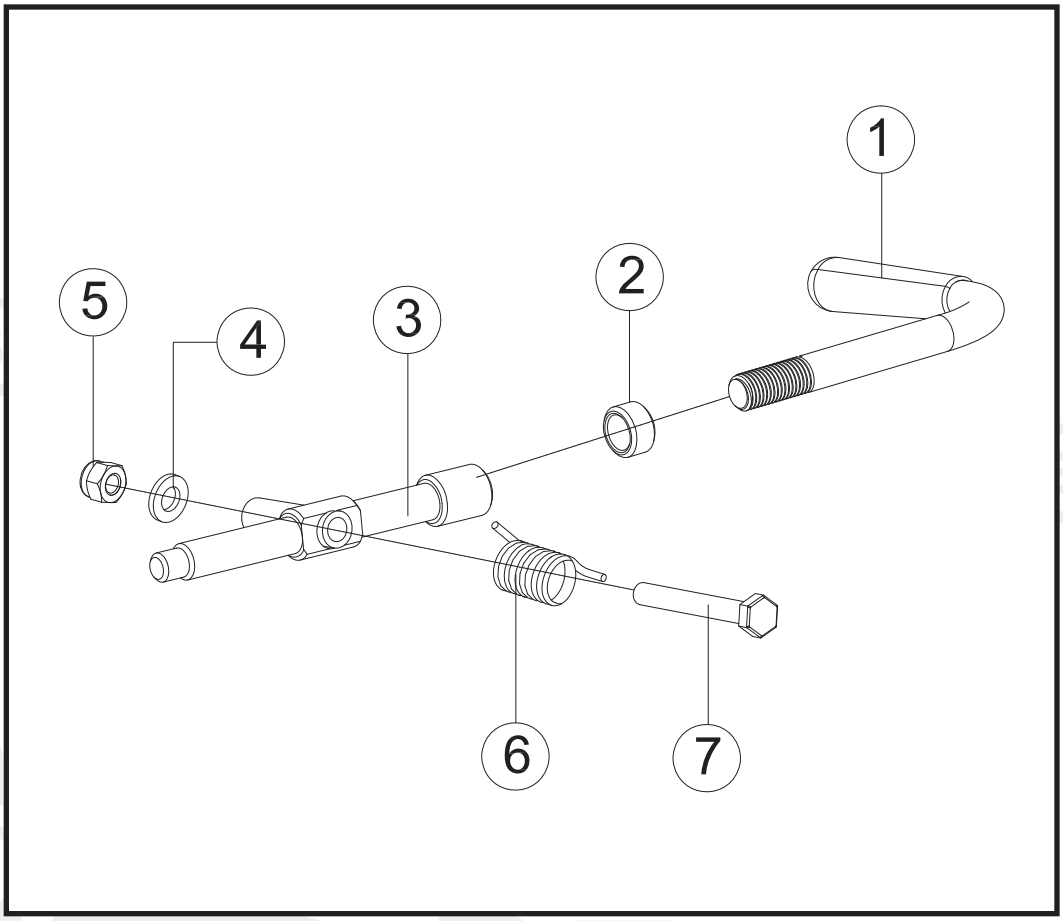


Description	Quantity	Item Number
Seat slide frame	1	1
Seat locking Mech. (installed)	1	2
cover (intalled)	1	3
Roller Assy. (installed)	8	4

22-90-271

Seat Slide Ajustment Lever

900Sr

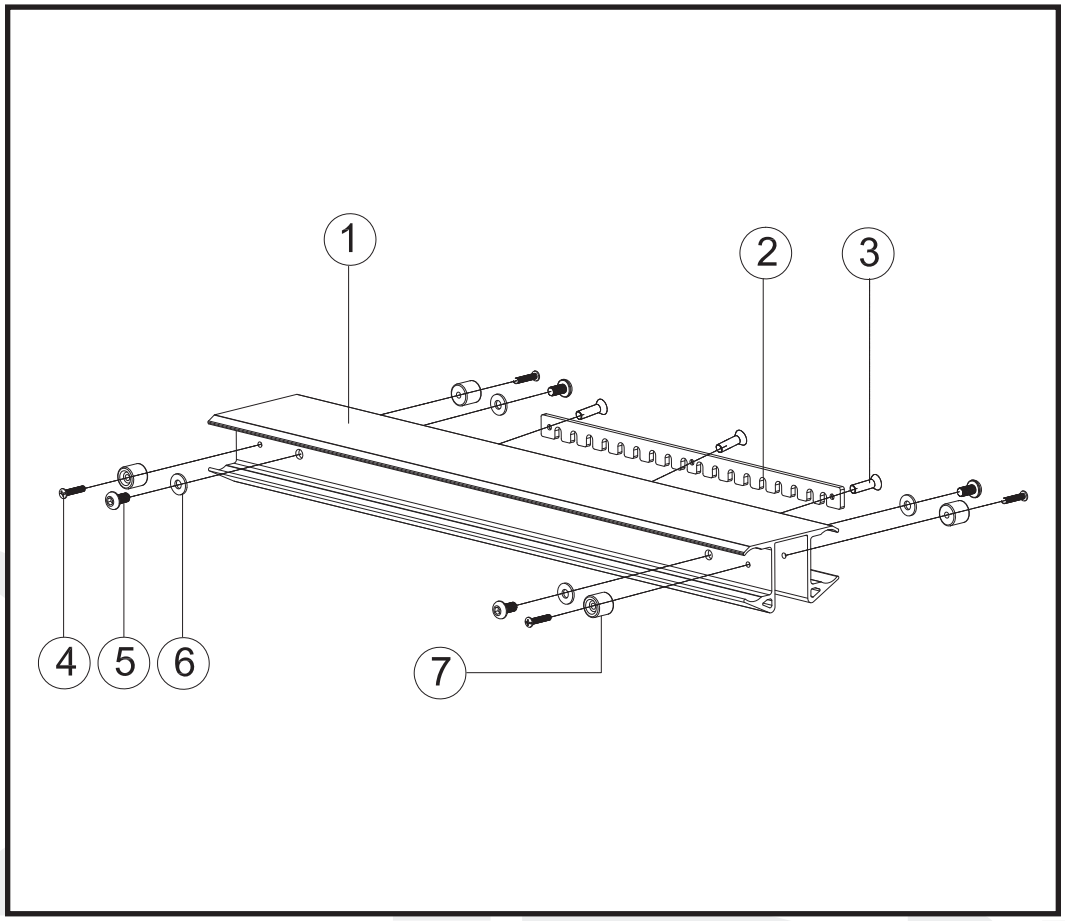


Description	Quantity	Item Number
Lever	1	1
Locking Nut M8	1	2
Locking Pin	1	3
Flat Washer	1	4
Hex Nut	1	5
Spring	1	6
Bolt	1	7

22-90-273

Seat Track

900Sr

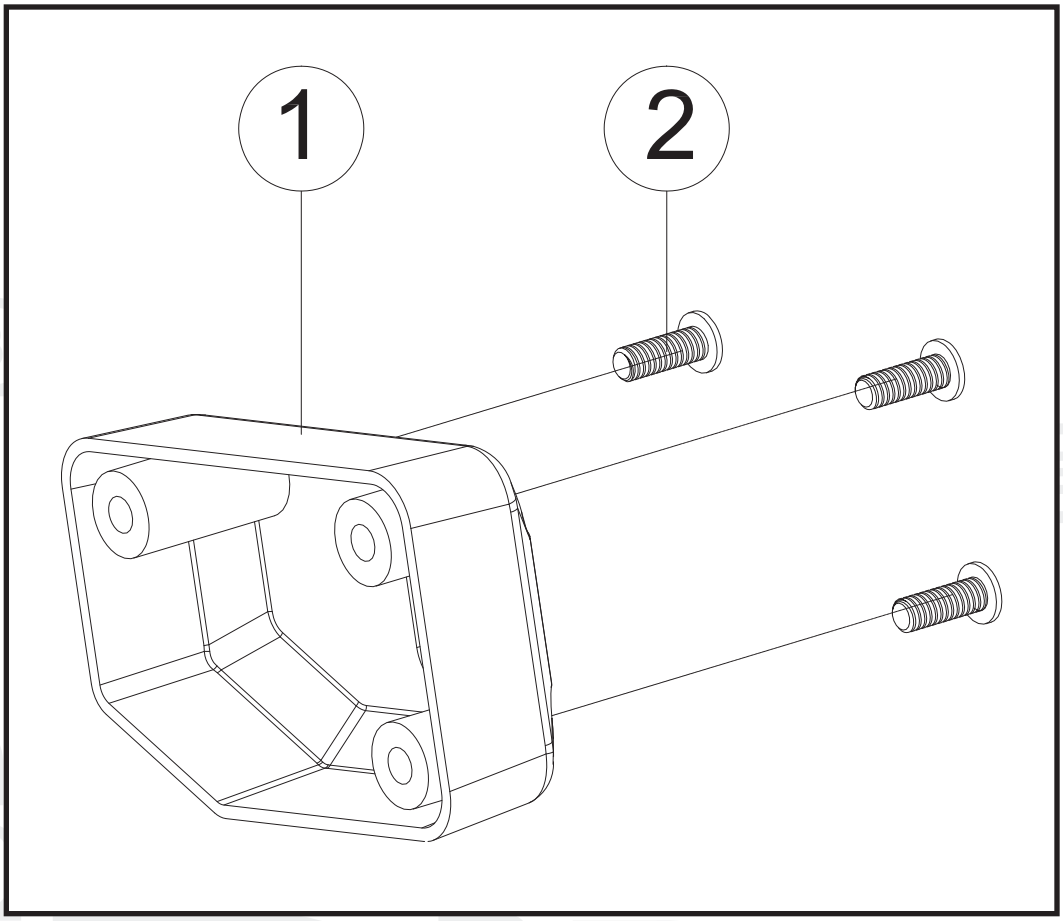


Description	Quantity	Item Number
Seat Track	1	1
Seat Positioning Track	1	2
Bolt M5 x 14mm	3	3
Bolt M5 x 25mm	4	4
Bolt M8 x 20mm	4	5
Flat Washer	4	6
Seat Track Stop	4	7

22-90-275

Seat Slide Adjustment Lever Cover

900Sr

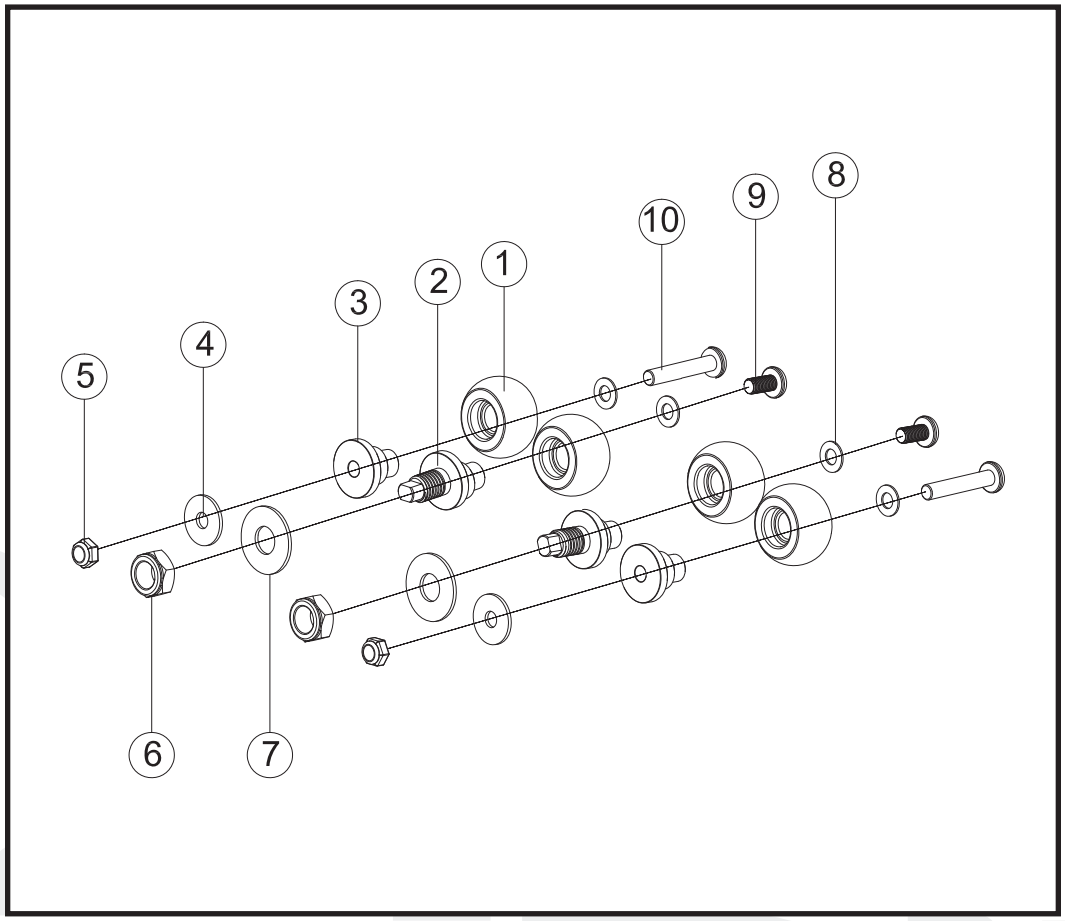


Description	Quantity	Item Number
Cover	1	1
Bolt	3	2

22-90-277

Seat Slide Roller Kit

900Sr

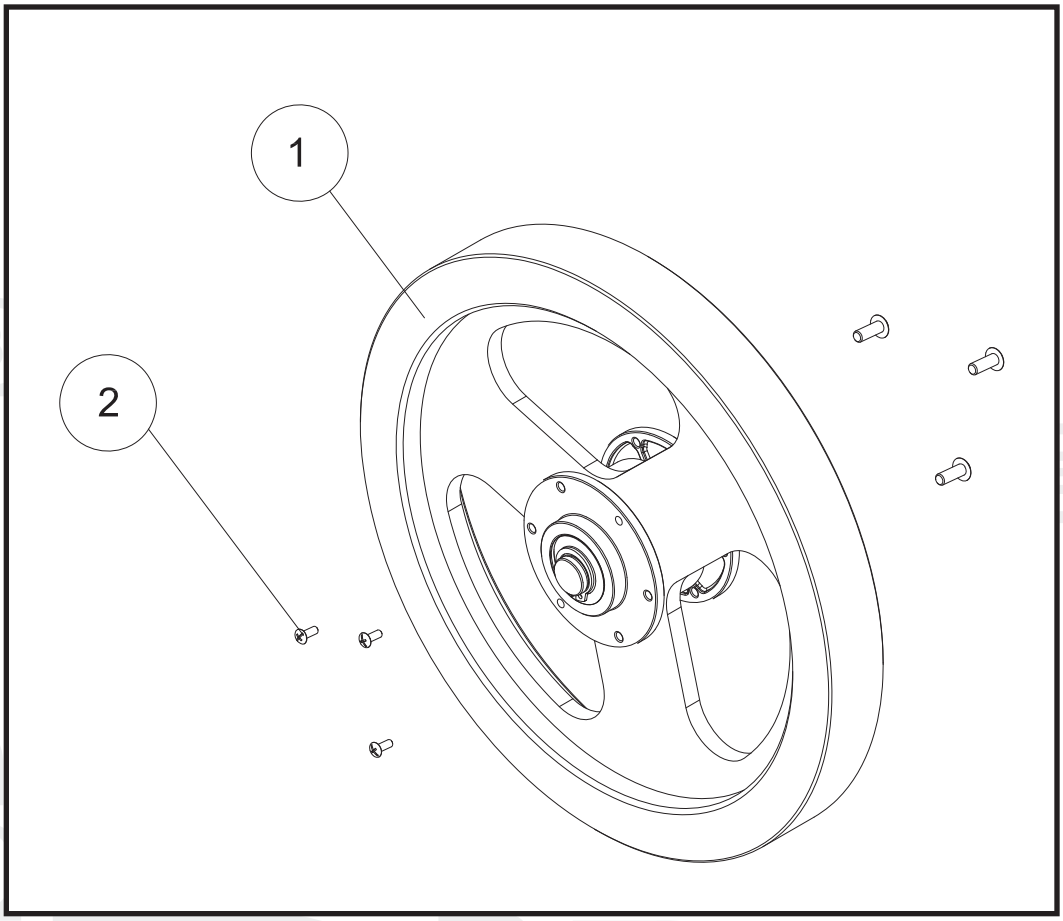


Description	Quantity	Item Number
Roller	8	1
Tension Axle	4	2
Shaft Sleve	4	3
Flat Washer 8x25x2t	4	4
Hex Nut M8	4	5
Hex Nut M14	4	6
Flat Washer 14.3x25x2t	4	7
Flat Washer 8x16x2t	8	8
Bolt M8 x 16mm	4	9
Bolt M8 x 40	4	10

22-90-285

Flywheel Assembly

900Sr

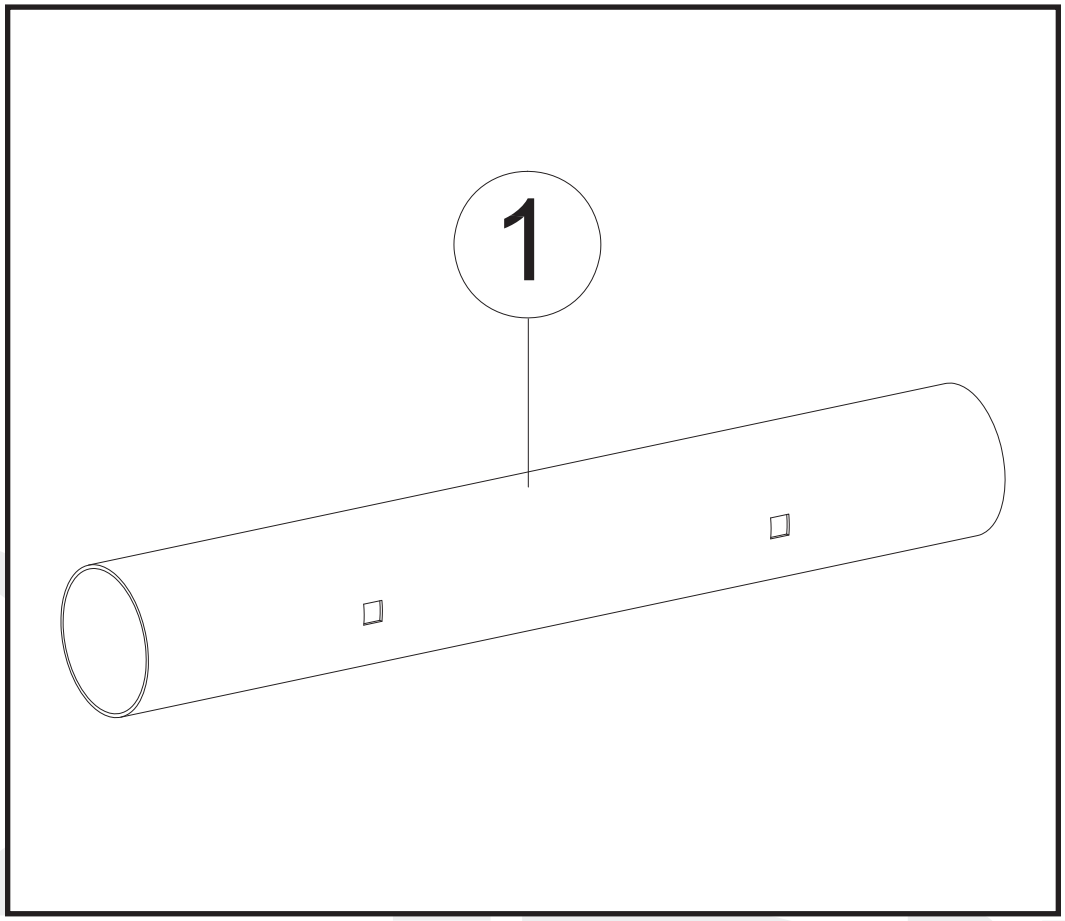


Description	Quantity	Item Number
Flywheel Assembly with mounting brackets	1	1
Screw M5 x 10mm	6	2

22-90-289

Front Stabilizer

900sr

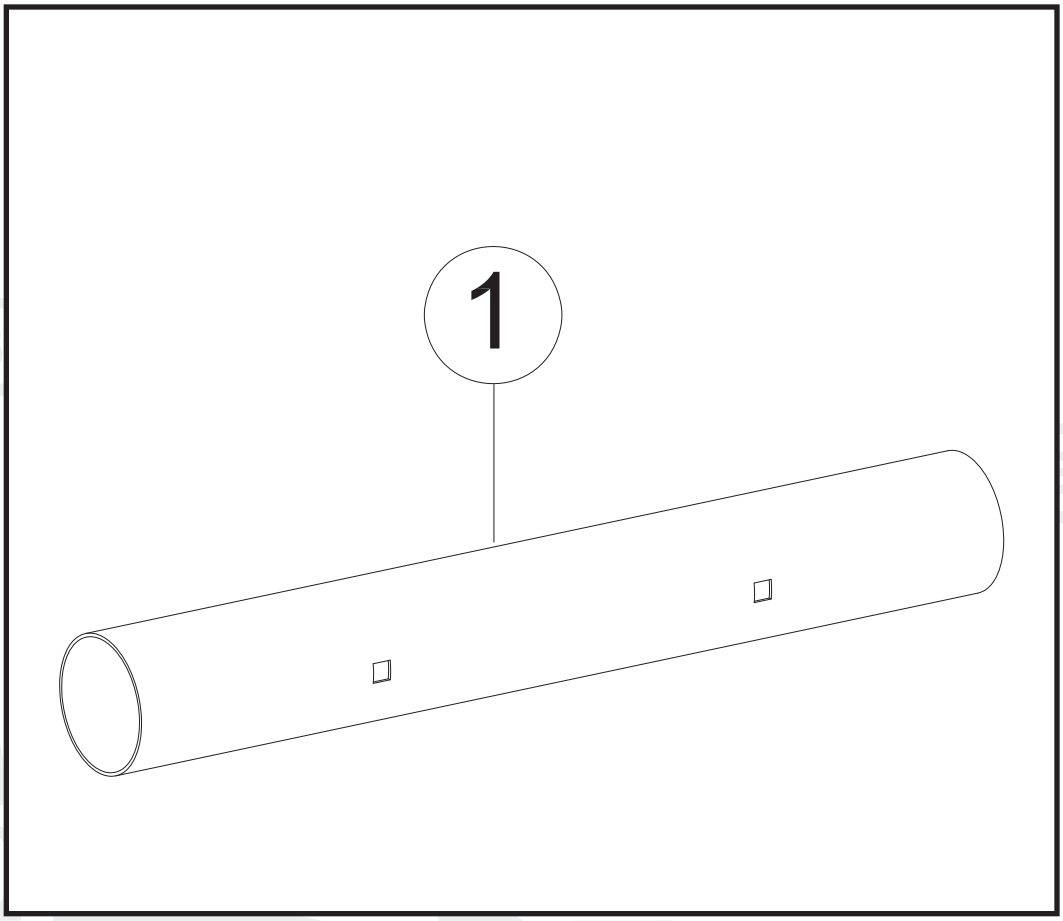


Description	Quantity	Item Number
Front Stabilizer	1	1

22-90-291

Rear Stabilizer

900Sr

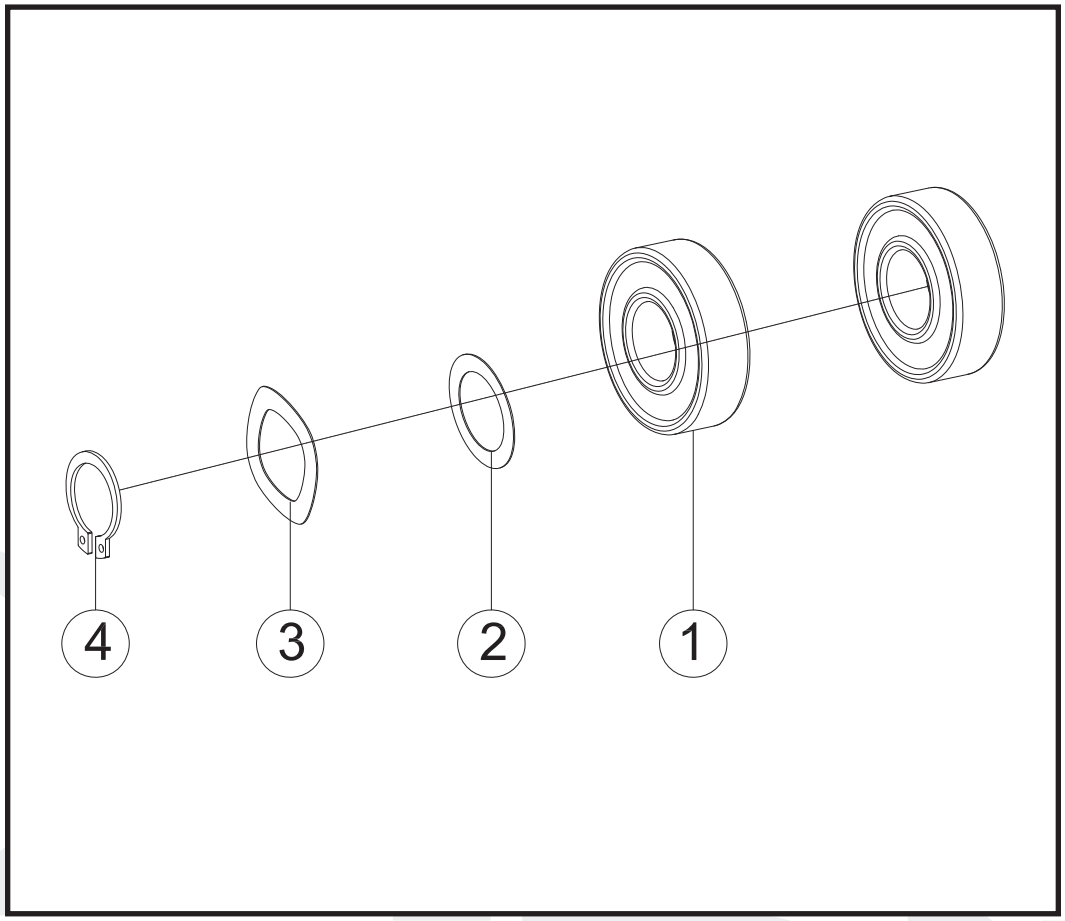


Description	Quantity	Item Number
Rear Stabilizer	1	1

22-90-293

BB Bearings

900Sr

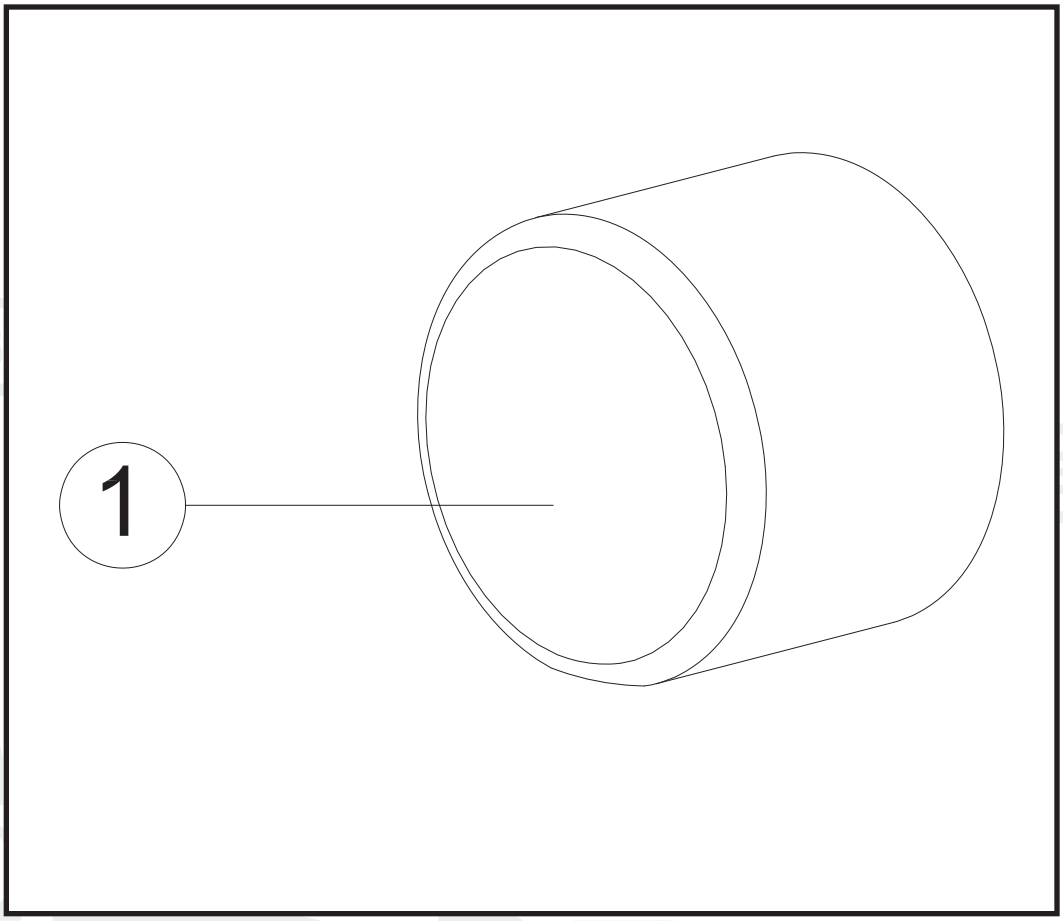


Description	Quantity	Item Number
Bearings 6004RS	2	1
Flat Washer	1	2
Wavy Washer	1	3
C Clip	1	4

22-90-295

Front Stabilizer Endcaps

900Sr



Description	Quantity	Item Number
Front Stabilizer Endcap	2	1